WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1770
21" BANDSAW w/FOOT BRAKE

OWNER'S MANUAL

Phone: (360) 734-3482 • Online Technical Support: tech-support@shopfox.biz

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#11150BL

Printed in Taiwan

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

Woodstock Technical Support

This machine has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: **tech-support@shopfox.biz**. Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from **http://www.shopfox.biz**.
If you have comments about this manual, please contact us at:

Woodstock International, Inc.
Attn: Technical Documentation Manager
P.O. Box 2309
Bellingham, WA 98227
Email: manuals@woodstockint.com

Functional Overview

The bandsaw is one of the most versatile cutting tools in the shop and is capable of the following cuts:

- Miters and Angles
- Compound Angles
- Resaw Cuts
- Rip and Crosscuts
- Curves and Circles
- Stacked Cuts for Duplicate Parts

The blade is a flexible steel band with teeth on one edge that fits around two aligned wheels with slightly crowned rubber tires, which help the blade track in the center of the wheels during operation.

One wheel stays in a fixed position and is driven by a motor. The other wheel spins freely and is adjustable toward or away from the fixed wheel, which controls the tension of the installed blade. This wheel also features a tracking control that allows the wheel to tilt forward or backward to adjust how the blade rides on the wheel. The rotation of both wheels pulls the blade downward toward the table.

When a workpiece is pushed against the moving blade, the downward force of the blade teeth scrape across the workpiece and cut it. Blade guides on both sides of the cutting area keep the blade from flexing or being pushed off the wheels from the horizontal pressure of the workpiece while cutting.

Since the purpose of the blade guides is to provide support while cutting, they should be as close as possible to the blade; however, the blade guides should only touch the blade while a workpiece is being cut, or the constant friction will reduce the life of the blade. Also the upper blade guide assembly should be adjusted as close as possible to the workpiece to provide maximum support and safely cover any unused area of the blade with the blade guard.

Also, a foot brake can be used to cut power to the motor, quickly bringing the blade to a halt.

MACHINE SPECIFICATIONS

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MODEL W1770
SHOP FOX® 5 HP 21" BANDSAW

Product Dimensions

Weight..... 594 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 39-1/2 x 28-5/8 x 78 in.
Footprint (Length x Width)..... 21-5/8 x 33-1/2 in.

Shipping Dimensions

Type..... Wood Slat Crate
Content..... Machine
Weight..... 692 lbs.
Length x Width x Height..... 38 x 26 x 85 in.

Electrical

Power Requirement..... 220V, Single-Phase, 60 Hz
Prewired Voltage..... 220V
Full-Load Current Rating..... 22A
Minimum Circuit Size..... 30A
Connection Type..... Cord & Plug
Power Cord Included..... No
Recommended Power Cord..... "S"-Type, 3-Wire, 10 AWG, 300 VAC
Plug Included..... No
Recommended Plug Type..... L6-30
Switch Type..... Magnetic Switch w/Overload Protection

Motors

Main

Type..... TEFC Capacitor-Start Induction
Horsepower..... 5 HP
Phase..... Single-Phase
Amps..... 22A
Speed..... 1725 RPM
Power Transfer ..... Belt Drive
Bearings..... Shielded & Permanently Lubricated

Main Specifications

Main Specifications

Bandsaw Size..... 21 in.
Max Cutting Width (Left of Blade)..... 20 in.
Max Cutting Width (Left of Blade) w/Fence..... 18-3/4 in.
Max Cutting Height (Resaw Height)..... 14-1/4 in.
Blade Speeds..... 4600 FPM

Blade Information

Standard Blade Length..... 165 in.
Blade Length Range..... 164 – 165-1/2 in.
Blade Width Range..... 1/4 – 1-3/8 in.
Type of Blade Guides..... Ball Bearing
Guide Post Adjustment Type..... Rack & Pinion
Has Quick-Release..... Yes

Table Information

Table Length..... 29-1/2 in.
Table Width..... 20-3/4 in.
Table Thickness..... 1-7/8 in.
Table Tilt..... Left 5, Right 45 deg.
Table Tilt Adjustment Type..... Rack & Pinion
Floor-to-Table Height..... 35-1/2 in.
Fence Locking Position..... Front
Fence is Adjustable for Blade Lead..... No
Resaw Fence Attachment Included..... Yes
Miter Gauge Included..... Yes

Construction Materials

Table..... Precision Ground Cast Iron
Trunnion..... Cast Iron
Fence..... Precision Ground Cast Iron
Base/Stand..... Pre-Formed Steel
Frame/Body..... Pre-Formed Steel
Wheels..... Computer-Balanced Cast Iron
Tire..... Polyurethane
Wheel Cover ..... Pre-Formed Steel
Paint Type/Finish..... Powder Coated

Other Related Information

Wheel Diameter..... 20-3/4 in.
Wheel Width..... 1-1/2 in.
Number of Dust Ports..... 2
Dust Port Size..... 4 in.
Compatible Mobile Base..... D2058A, D2246A

Other

Country of Origin ..... Taiwan
Warranty ..... 2 Years
Approximate Assembly & Setup Time ..... 15 Minutes
Serial Number Location ..... ID Label on Upper Wheel Cover
ISO 9001 Factory ..... Yes
CSA, ETL, or UL Certified/Listed ..... Yes

Controls and Features

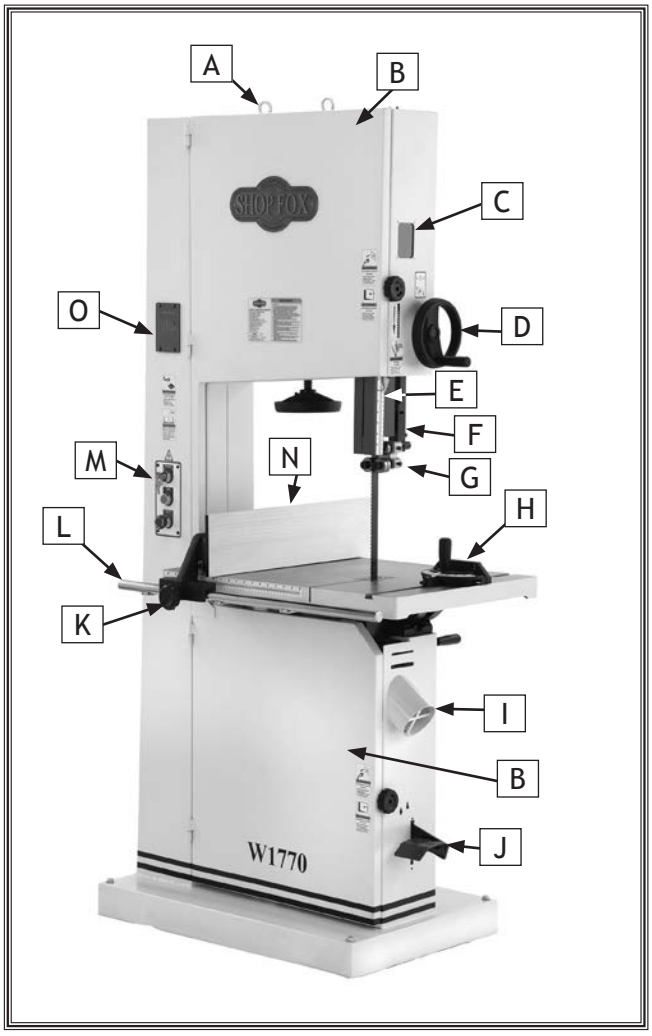


Figure 1. W1770 front features.

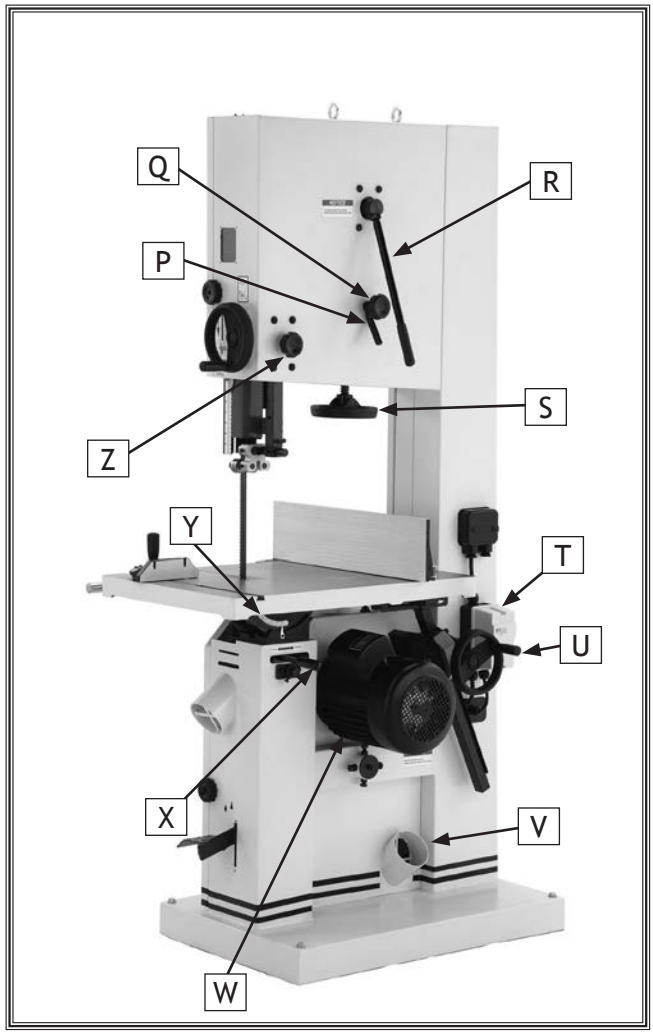


Figure 2. W1770 rear features.

A. Eye Bolt
B. Hinged Wheel Cover
C. Blade Tracking Window
D. Guide Post Handwheel
E. Cutting Height Scale
F. Guide Post
G. Ball Bearing Blade Guides
H. Miter Gauge
I. 4" Dust Port
J. Foot Brake
K. Fence Lock Knob
L. Rail
M. Key Switch, Start and Stop Buttons
N. Resaw Fence
O. Blade Tension Scale
P. Blade Tracking Lock Lever
Q. Blade Tracking Knob
R. Quick Release Blade Tension Lever
S. Blade Tension Handwheel
T. Magnetic Switch
U. Table Tilt Handwheel
V. 4" Dust Port
W. Motor
X. Table Tilt Lock Lever
Y. Table Tilt Scale
Z. Guide Post Lock Knob

SAFETY

READ MANUAL BEFORE OPERATING MACHINE. FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL RESULT IN PERSONAL INJURY.

⚠DANGER Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠WARNING Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

⚠CAUTION Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.

NOTICE This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.

2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.

3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.

4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.

5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.

6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.

9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power ***OFF*** and allow all moving parts to come to a complete stop before leaving machine unattended.

11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

12. **KEEP WORK AREA CLEAN AND WELL LIT**. Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.

14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

15. **MAINTAIN MACHINERY WITH CARE**. Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

17. **REMOVE ADJUSTING KEYS AND WRENCHES**. Make a habit of checking for keys and adjusting wrenches before turning machinery ***ON***.

18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.

19. **USE RECOMMENDED ACCESSORIES**. Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.

20. **DO NOT FORCE MACHINERY**. Work at the speed for which the machine or accessory was designed.

21. **SECURE WORKPIECE**. Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

22. **DO NOT OVERREACH**. Keep proper footing and balance at all times.

23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR**. Know and avoid conditions that cause the workpiece to "kickback."

24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**

25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

Additional Safety for Bandsaws

⚠WARNING

Like all machinery there is potential danger when operating this bandsaw. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this mill with respect and caution to reduce the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

1. **BLADE CONDITION**. Do not operate with dull, cracked or badly worn blade. Dull blades require more effort to use and are difficult to control. Inspect blades for cracks and missing teeth before each use.

2. **HAND PLACEMENT.** Never position fingers or hands in line with the cut. Serious personal injury could occur.

3. **GUARDS.** Do not operate this bandsaw without the blade guard in place and wheel covers closed.

4. **BLADE REPLACEMENT.** When replacing blades, make sure teeth face down toward the workpiece and the blade is properly tensioned before operating.

5. **WORKPIECE HANDLING.** Never hold small workpieces with your fingers during a cut. Always support/feed the workpiece with push stick, table support, vise, or some type of clamping fixture.

6. **CUTTING TECHNIQUES.** Plan your cuts so you always cut out of the wood. DO NOT back the workpiece away from the blade while the saw is running. If you need to back the work out, turn the bandsaw ***OFF*** and wait for the blade to come to a complete stop, and DO NOT twist or put excessive stress on the blade while backing work away.

7. **LEAVING WORK AREA.** Never leave a machine running and unattended. Allow the bandsaw to come to a complete stop before you leave it unattended. Remove the switch disabling key to ensure unauthorized use of the machine.

8. **FEED RATE.** Always feed stock evenly and smoothly. DO NOT force or twist blade while cutting, especially when sawing small curves, and allow blade to reach full speed before cutting.

9. **WORKPIECE MATERIAL.** This machine is designed to cut wood only. It is not designed to cut metal or use cutting fluid.

10. **MAINTENANCE/SERVICE.** All inspections, adjustments, and maintenance are to be done with the power ***OFF*** and the plug removed from the outlet. Wait for all moving parts to come to a complete stop.

11. **BLADE CONTROL.** Do not attempt to stop or slow the blade with your hand or a workpiece. Allow the blade to stop on its own or use the foot brake to quickly stop the blade.

12. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact Tech Support at (360) 734-3482.

Avoiding Potential Injuries

Figure 3. Never place hands in line of cut.

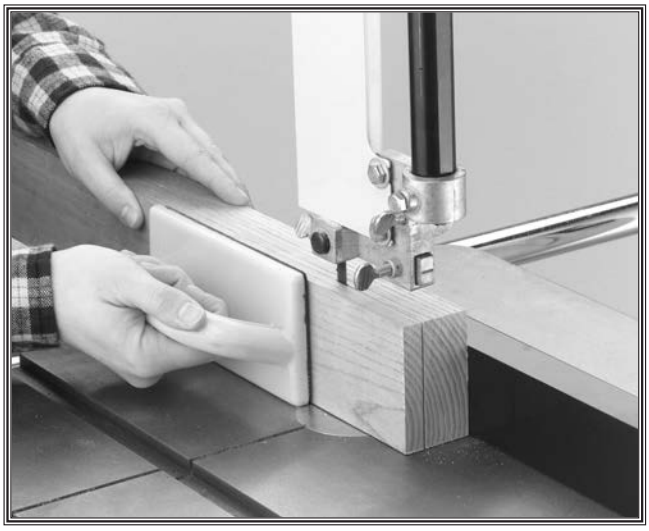


Figure 4. Use push blocks when necessary.

Figure 6. Use push sticks whenever possible.

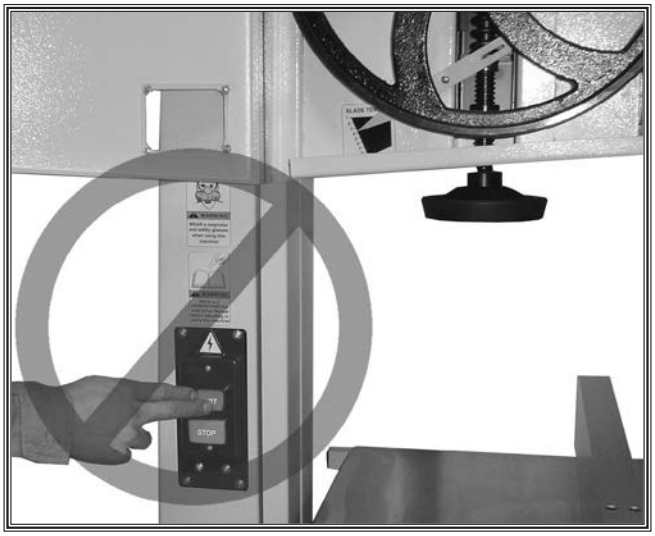


Figure 5. Never start motor with wheel covers open.

Figure 7. Unplug saw before changing blades.

ELECTRICAL

⚠WARNING

The machine must be properly set up before it is safe to operate. DO NOT connect this machine to the power source until instructed to do so in the "Test Run" portion of this manual.

220V Operation

The Model W1770 is wired for 220V single-phase operation. We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit size given below. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. This machine must be connected to a grounded circuit!

A plug is not supplied with this machine. See below for the recommended plug type for this machine.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

Extension Cords

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

- Use a cord rated for Standard Service (S).
- Do not use an extension cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

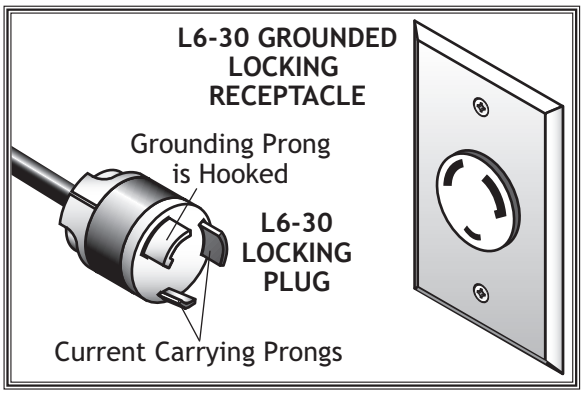


Figure 8. L6-30 plug and receptacle.

⚠WARNING

DO NOT work on your electrical system if you are unsure about electrical codes and wiring! Seek assistance from a qualified electrician. Ignoring this warning can cause electrocution, fire, or machine damage.

Electrical Specifications

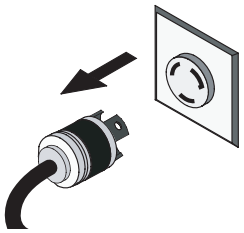
Operating Voltage	Amp Draw	Min. Circuit Size	Recommended Plug	Extension Cord
220V Operation	22A	30A	NEMA L6-30 (not incl.)	10 Gauge, 3 Wire, 300VAC

SETUP

Unpacking

This machine has been carefully packaged for safe transportation. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

⚠WARNING



Keep machine disconnected from power until instructed otherwise.

Items Needed for Setup

The following items are needed to complete the setup process, but are not included with your machine:

Description	Qty
• Safety Glasses (for each person)	1
• Machinist's Square	1
• Solvent Cleaner	As Needed
• Shop Rags	As Needed
• Wrench 14mm	1
• Feeler Gauge 0.016"	1
• Straightedge	1
• Fine Ruler	1
• Dust Collector	1
• Dust Hoses 4"	2
• Hose Clamps	2
• Forklift (1000 Lb Capacity)	1
• 1000 Lb Capacity Chain or Strap w/Hook	1

Inventory

The following is a description of the main components shipped with the Model W1770. Lay the components out to inventory them.

Note: *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for safer shipping.*

Box Inventory (Figure 9) **Qty**

A. Guide Post Handwheel.....1
B. Miter Gauge 1
C. Fence 1
D. Resaw Fence.....1

Hardware and Tools

- Hex Wrenches 5, 6mm.....1 EA
- Wrenches 10/13, 17/19 .....1 EA
- Flat Washer 8mm (Resaw Fence) 1
- Resaw Fence Lock Handle (Resaw Fence) 1
- Moving Plate (Resaw Fence) 1
- Eye Bolts (Lifting) 2

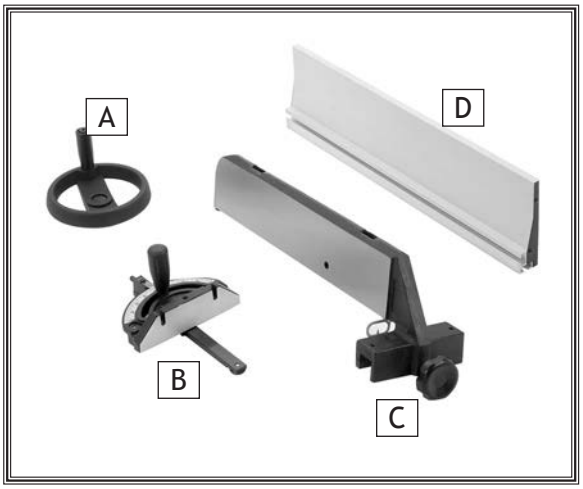
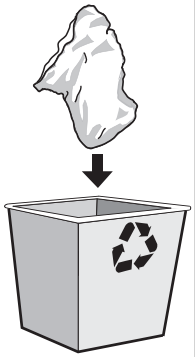


Figure 9. W1770 inventory.

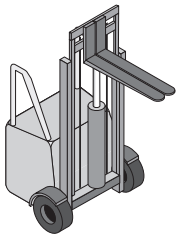


⚠WARNING

SUFFOCATION HAZARD!
Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.

Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some residential floors may require additional bracing to support both machine and operator.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your bandsaw.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- **Electrical:** Electrical circuits must be dedicated or large enough to handle amperage requirements. Outlets must be located near each machine, so power or extension cords are clear of high-traffic areas. Follow local electrical codes for proper installation of new lighting, outlets, or circuits.



⚠WARNING

USE helpers & power lifting equipment to lift this 21" Bandsaw with Brake. Otherwise, serious personal injury may occur.

⚠CAUTION

MAKE your shop "child safe." Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. NEVER allow untrained visitors in your shop when assembling, adjusting or operating equipment.

Cleaning Machine

The table and other unpainted parts of your bandsaw are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. DO NOT use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

⚠WARNING

NEVER clean with gasoline or other petroleum-based solvents. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!

⚠CAUTION

ALWAYS work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they DO NOT create fire or environmental hazards.

SETUP

Lifting & Moving

⚠WARNING

This is an extremely heavy machine. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and a forklift or a hoist when removing the machine from the crate. Use a chain or a lifting strap with a minimum of 1000 lbs. lifting capacity. If the chain or lifting strap breaks, serious personal injury may occur.

Take special care when moving this bandsaw. Only use one of the following methods to lift or move this bandsaw.

To move and place the bandsaw using the eye bolts, do these steps:

1. Use a forklift to move the bandsaw on the pallet to its final location.

2. Unbolt the bandsaw from the pallet.

3. Install the eye bolts shown in **Figure 10**, making sure they are threaded all the way in, then place the lifting hooks through the eye bolts and lift slowly with a forklift.

4. Remove the pallet and slowly set the bandsaw into position.

To move and place the bandsaw using wood shims, do these steps:

1. Use a forklift to move the bandsaw on the pallet to its final location.

2. Carefully place the forklift forks under the head and install a 1x4 shim between the head and the left fork and a 2x4 shim between the head and right fork so the bandsaw is level, as shown in **Figure 11**.

3. Unbolt the bandsaw from the pallet.

4. Lift the bandsaw off of the pallet, remove the pallet, and slowly set the bandsaw into position.

   Note: *If you are concerned about your forklift forks hitting the tension handwheel, remove the handwheel, then reinstall it after lifting.*

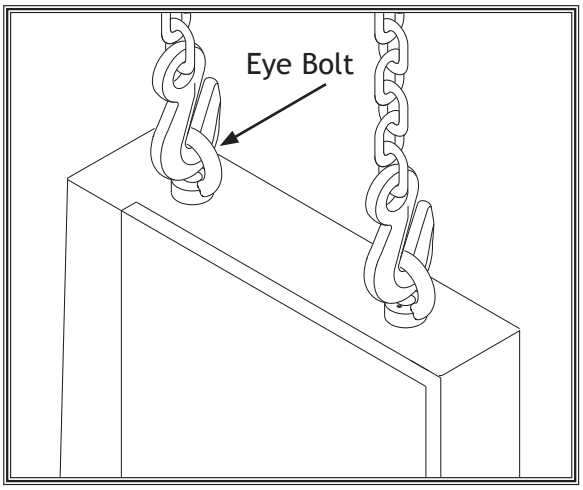


Figure 10. Lifting the bandsaw.

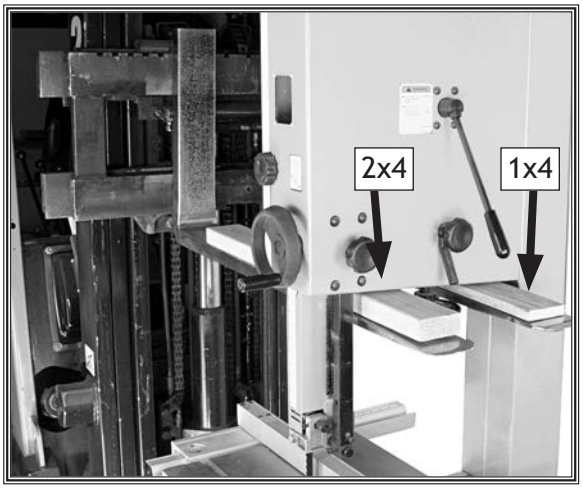


Figure 11. Example of lifting bandsaw with forklift using wood shims.

Mounting to Shop Floor

Although not required, we recommend that you mount your new bandsaw to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. You must use a precison level to level your machine.

You may also mount your bandsaw to a mobile base with-wheel locking or wheel retracting capabilities that keep the mobile base from rolling when the bandsaw is in use.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (**Figure 12**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application. **Figure 13** shows the mounting locations for this machine.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine at a later point.

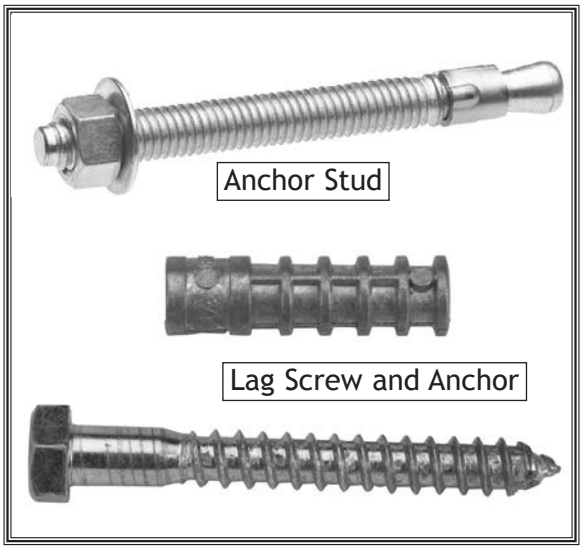


Figure 12. Typical fasteners for mounting to concrete floors.

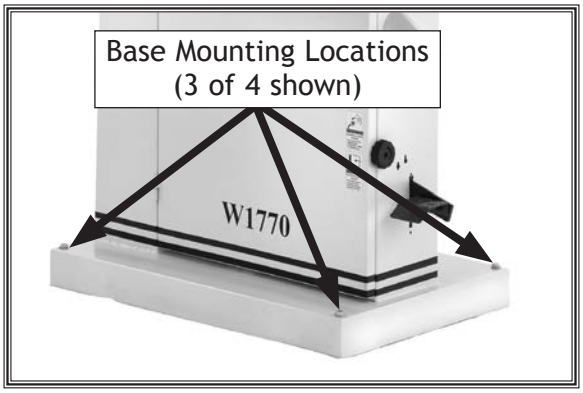


Figure 13. Location of machine base mounting locations.

SETUP

Fence

The fence rail is installed upside down at the factory.

To install the fence, do these steps:

1. Remove the cap screws holding the rail onto the table, and remove the rail.

2. Flip the rail over and reinstall it with the cap screws removed in **Step 1** (see **Figure 14**).

3. Place the fence on the rail (**Figure 15**) and tighten it securely with the hand knob. Refer to the instructions on **Page 29** to calibrate the pointer.

Figure 14. Tightening guard rail cap screws.

Figure 15. Installing fence onto rail.

Guide Post Handwheel

Insert the guide post handwheel onto the shaft, and secure it with the cap screw on the flat of the shaft, as shown in **Figure 16.**

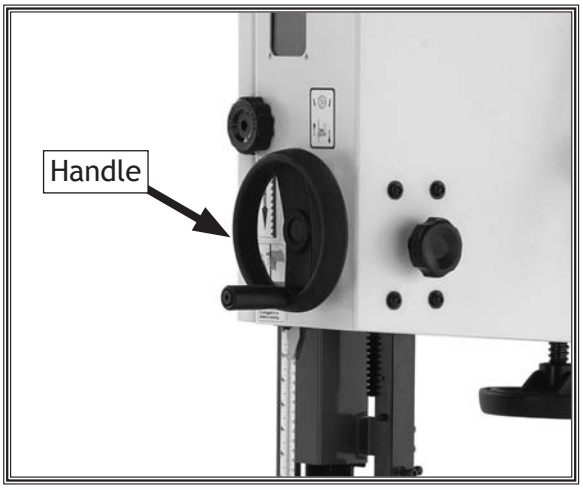


Figure 16. Guide post handwheel installed.

Blade Tracking

The blade tracking is primarily affected by the tilt of the upper wheel, also known as "center tracking"; and the alignment of both wheels, also known as "coplanar tracking." (For coplanar tracking, refer to the **Wheel Alignment** instructions on **Page 52**.)

The wheels on this bandsaw were aligned at the factory, so center tracking is the only adjustment that needs to be performed when the saw is new.

To center track the blade, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure the upper and lower blade guides are adjusted away from the blade (refer to **Adjusting Blade Guide Bearings** on **Page 23**).

3. Move the quick tension lever to the tightened position (**Figure 18**) and turn the blade tension handwheel (**Figure 17**) until the blade tension matches the mark on the blade tension scale for the appropriate blade width (refer to **Page 22** to tension the blade).

4. Open the upper wheel cover, then spin the upper wheel by hand at least three times and watch how the blade rides on the crown of the wheel through the tracking window. Refer to **Figure 19** for an illustration of this concept.

   — **If the blade rides in the center of the upper wheel and is centered on the peak of the wheel crown**, then the bandsaw is already center tracked properly and no further adjustments are needed at this time.

   — **If the blade does not ride in the center of the upper wheel and is not centered on the peak of the wheel crown,** then continue with the following steps.

5. Loosen the lock lever (**Figure 18**) so that the blade tracking knob can rotate.

6. Spin the upper wheel with one hand and rotate the blade tracking knob with the other hand to make the blade ride in the center of the bandsaw wheel tire.

7. Tighten the lock lever and close the upper wheel cover. **Note:** *For the best performance from your saw, regularly maintain proper tracking of the blade.*

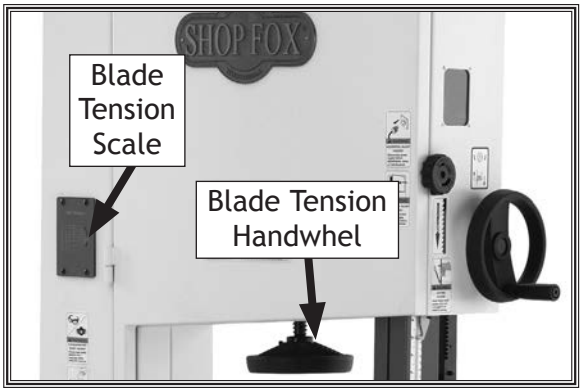


Figure 17. Front blade tensioning controls.

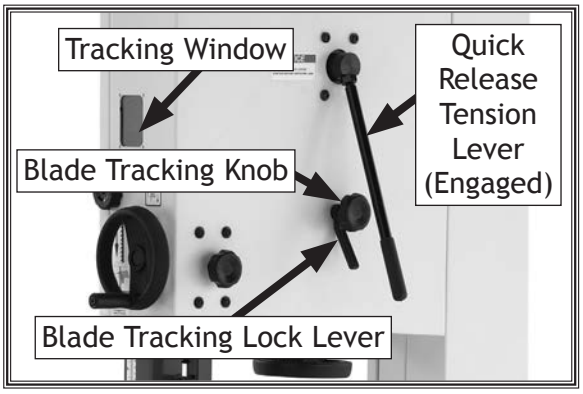


Figure 18. Rear blade tensioning and tracking controls.

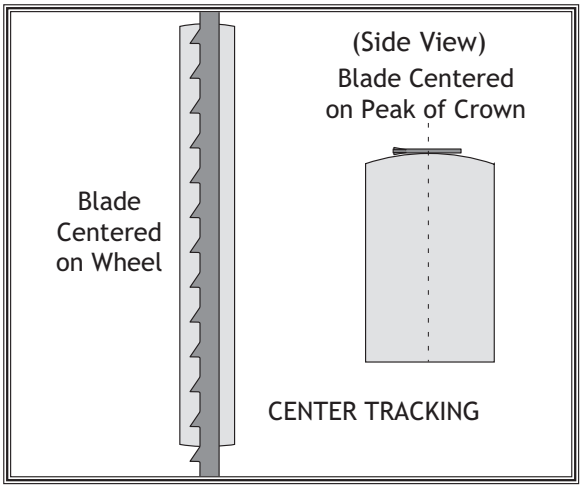


Figure 19. Center tracking profiles.

NOTICE

Changes in the blade tension may change the blade tracking.

SETUP

Positive Stop

The positive stop allows the table to be quickly and accurately returned to the horizontal (0˚) position after being adjusted to a different angle.

To set the positive stop, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Adjust the blade tension to the appropriate level for the blade size on the blade tension scale (see **Page 22**).

3. Loosen the jam nut that locks the positive stop bolt in place, as shown in **FIgure 20**.

4. Raise the guide post and place a machinist's square on the table next to the side of the blade as illustrated in **Figure 21**. Adjust the table square with the blade using the table tilt handwheel, then secure with the table tilt lock lever.

5. Adjust the positive stop bolt so it just touches the table and secure it by tightening the jam nut against the bandsaw.

6. Check the adjustment for accuracy once you have tightened the jam nut.

7. Loosen the screw on the table tilt scale pointer, but do not remove it.

8. Align the tip of the pointer with the 0˚ mark on the table tilt scale, then tighten the screw to secure the setting.

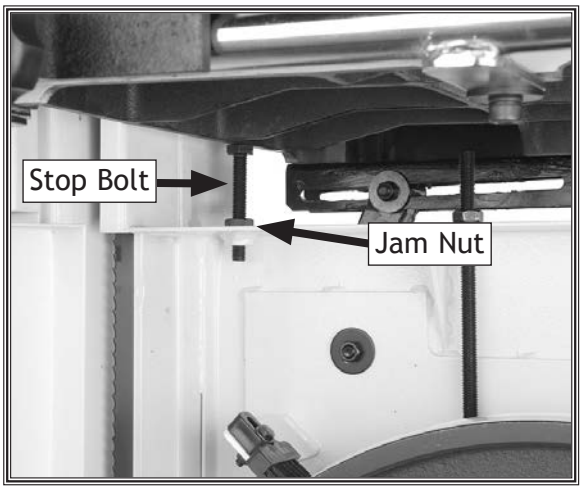


Figure 20. Positive stop bolt and jam nut (as viewed from front).

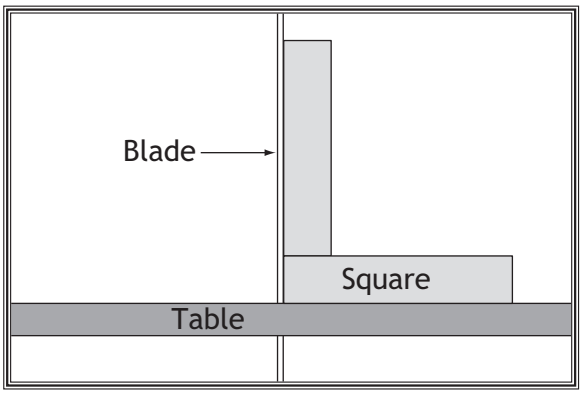


Figure 21. Squaring table to blade.

Dust Collection

Recommended CFM at each Dust Port: ..... 400 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or Y's, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.

Figure 22. Dust hoses connected to dust port.

⚠CAUTION

DO NOT operate this machine without an adequate dust collection system. This machine creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

To connect the dust collection hoses, do these steps:

1. Fit a 4" dust hose over each dust port, as shown in **Figure 22**, and secure in place with a hose clamp.

2. Tug each hose to make sure it does not come off.

   Note: *A tight fit is necessary for proper performance.*

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety disabling mechanism on the switch works correctly, and 3) the OFF button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 57**. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine, do these steps:

1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is set up properly.

2. Ensure all tools and objects used during setup are cleared away from the machine.

3. Connect the machine to the power source.

4. Verify that the machine is operating correctly by turning the switch disabling key (**Figure 23**) to "1" and turning the machine ***ON***.

   — When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   — Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

5. Press the OFF button to stop the machine.

6. WITHOUT resetting the OFF button, press the ON button. The machine should not start.

   — If the machine does not start, the OFF button safety feature is working correctly.

⚠WARNING

Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses to reduce the risk of injury.

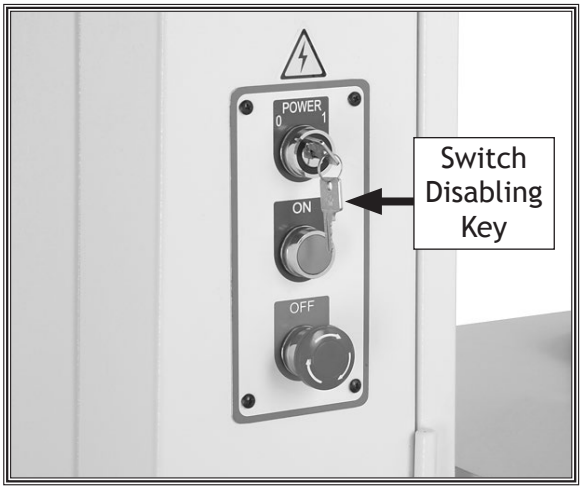


Figure 23. W1770 switch disabling key and ON/OFF switch

SETUP

— If the machine does start (with the stop button pushed in), immediately disconnect power to the machine. The OFF button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

7. Push the OFF button in, then twist it clockwise so it pops out. When the OFF button pops out, the switch is reset and ready for operation (see **Figure 24**).

8. Turn the bandsaw ***ON*** and allow it to reach full speed, then press the foot brake (**Figure 1**, **Page 5**) completely.

— If the bandsaw blade stops the foot brake is working correctly; continue to the next step.

— If the bandsaw blade does not stop moving, the foot brake feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

9. Make sure the blade has fully stopped, open the top and bottom wheel covers a few inches, then turn the bandsaw ***ON***.

— If the bandsaw does not start the upper wheel cover limit switch (**Figure 25**) is working correctly; continue to the next step.

— If the bandsaw starts, immediately disconnect power. The upper wheel cover limit switch is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

10. Close the upper and lower wheel covers.

11. Turn the switch disabling key to "0", as shown in **Figure 23**.

12. Try to turn the machine ***ON***.

— If the bandsaw does not start, the switch disabling feature is working as designed. The Test Run is complete.

— If the bandsaw starts, immediately disconnect power. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

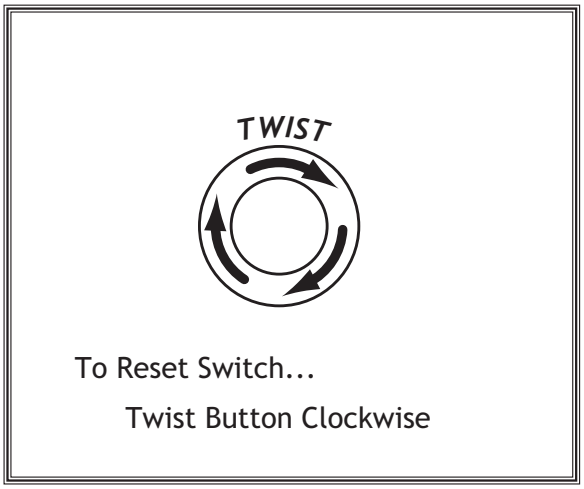


Figure 24. Resetting the switch.

Figure 25. Upper door limit switch.

⚠WARNING

Keep your hands away from the bandsaw blade when the door is open during Step 9 of this procedure in case the limit switch does not work! Failure to follow this warning may result in serious personal injury!

Tensioning Blade

A properly tensioned blade is essential for making accurate cuts and is required before making many bandsaw adjustments. (Everytime you replace the blade, you should perform this procedure because all blades tension differently.)

To tension the bandsaw blade, do these steps:

1. Make sure the blade is tracking properly (refer to **Page 17**), and complete the **Test Run** procedure (**Page 20**).

2. Raise the upper blade guide assembly as high as it will go, and adjust the upper and lower guide blocks as far away from the blade as possible (refer to **Adjusting Blade Guide Bearings** on **Page 23**).

   Note: *This procedure will NOT work if the guide blocks have any contact with the blade.*

3. Move the quick tension lever to the tightened position and turn the blade tension handwheel until the blade tension matches the mark on the blade tension scale (see **Figure 26**) for the appropriate blade width.

4. Turn the bandsaw ***ON***.

5. Slowly release the tension one quarter of a turn at a time. When you see the bandsaw blade start to flutter, stop decreasing the tension.

6. Now, slowly increase the tension until the blade stops fluttering, then tighten the tension another quarter turn.

7. Look at what the blade tension scale reads and use that as a guide for tensioning that blade in the future.

   Note: *Always release blade tension after use to increase blade life and reduce strain on the bandsaw components. The quick release tension lever works perfectly for this purpose.*

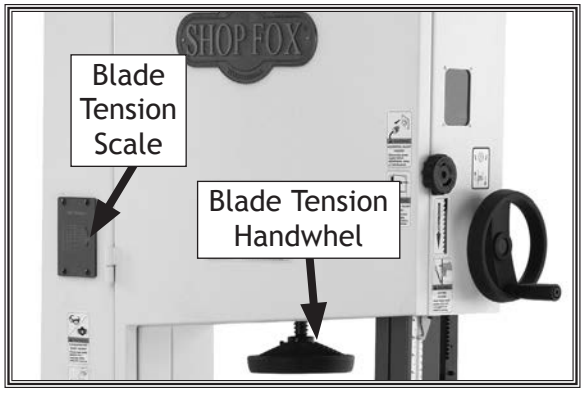


Figure 26. Front blade tensioning controls.

Adjusting Blade Guide Bearings

The blade guides provide side-to-side support to keep the blade straight while cutting. The blade guides are designed to be adjusted in two ways—forward/backward and side-to-side.

To adjust the upper blade guides, do these steps:

1. Make sure the blade is tracking properly and that it is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Familiarize yourself with the upper blade guide controls shown in **Figure 27 & 28**.

4. Loosen the lateral adjustment rod bolt, loosen the support bearing adjustment shaft bolt, and adjust the blade guides until the edges of the bearings are $^{1}/_{16}$" behind the blade gullets, as illustrated in **Figure 29**.

   Note: *The $^{1}/_{16}$" spacing is ideal, although with larger blades it may not be possible. In such cases, adjust the guide bearings as far forward to the blade gullets as possible, and still maintain the proper support bearing spacing adjustment.*

NOTICE

Make sure that the blade teeth will not contact the guide bearings when the blade is against the rear support bearing during the cut or the blade teeth will be ruined.

5. Tighten the lateral adjustment rod bolt.

6. Loosen the bearing rotation adjustment bolts on both sides of the blade.

7. Rotate the knurled knobs to position the bearings 0.004" away from the blade.

   Note: *0.004" is approximately the thickness of a dollar bill.*

8. Tighten both of the the bearing rotation adjustment bolts to lock the blade guide bearings in position.

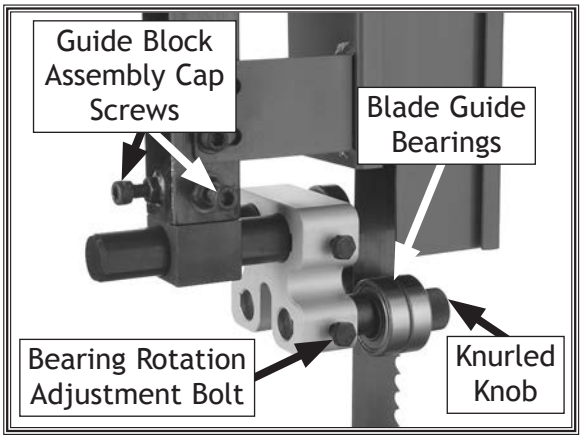


Figure 27. Upper blade guide controls (rear view).

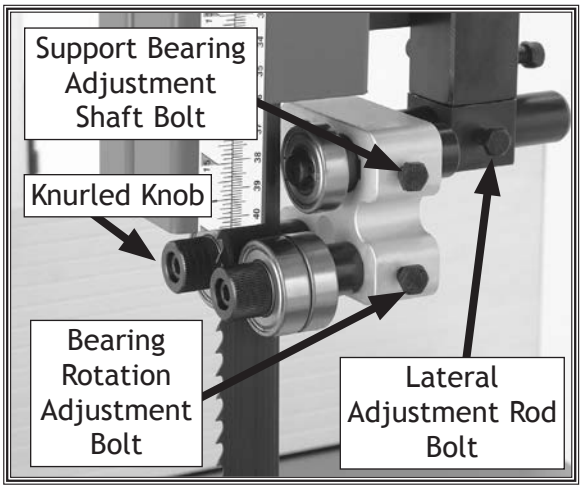


Figure 28. Upper blade guide controls (front view).

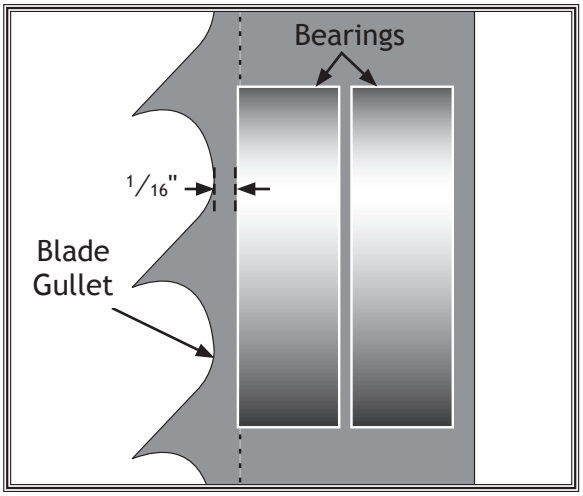


Figure 29. Lateral adjustment of blade guides.

NOTICE

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and guide bearings must be properly adjusted and locked before cutting operations.

To adjust the lower blade guides, do these steps:

1. Make sure the blade is tracking properly and that it is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Familiarize yourself with the lower blade guide controls shown in **Figures 30** and **31**.

4. Follow the instructions for adjusting the upper blade guides on **Page 23** in a similar manner for adjusting the lower blade guides.

   Note: *The lateral adjustment rod cap screw and guide block cap screws are located below the table tilt lock lever (see **Figure 31**).*

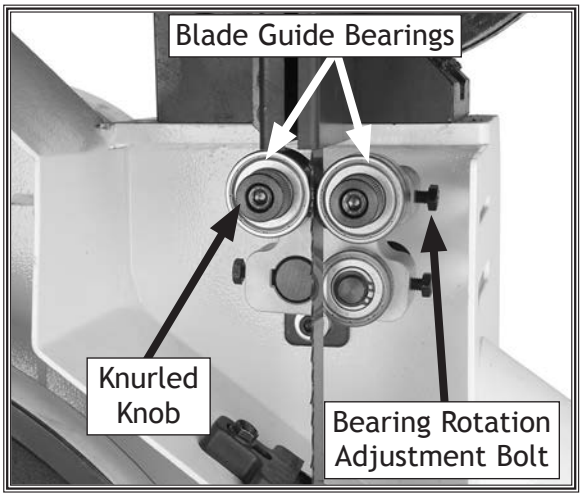


Figure 30. Lower blade guide controls (front view).

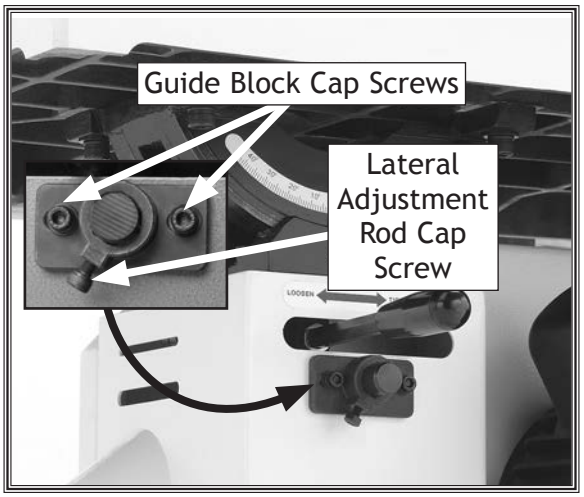


Figure 31. Lower blade guide controls (rear view).

Adjusting Support Bearings

NOTICE

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and blade guide bearings must be properly adjusted before cutting operations.

The support bearings are positioned behind the blade for support during cutting operations, because the blade is typically pushed back with the pressure from the advancing workpiece. Proper adjustment of the support bearings is an important part of making accurate cuts and also keeps the blade teeth from coming in contact with the guide bearings while cutting.

To adjust the upper support bearing, do these steps:

1. Make sure the blade is tracking properly and that it is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Familiarize yourself with the upper support bearing controls shown in **Figures 27 & 28** on **Page 23**.

4. Loosen the guide block assembly cap screws and rotate the blade guide assembly side-to-side, until the blade is perpendicular with the face of the support bearing, as illustrated in **Figure 32**.

5. Tighten the guide block assembly cap screws.

6. Loosen the bolt on the support bearing adjustment shaft—if it is not already loose.

7. Using a feeler gauge between the support bearing and the blade, position the bearing 0.016" away from the back of the blade, as illustrated in **Figure 33**.

   Note: *For a quick gauge, fold a crisp dollar bill in half twice (four thicknesses of a dollar bill is approximately 0.016") and place it between the support bearing and the blade as shown in **Figure 34**.*

8. Tighten the bolt to keep the support bearing locked in place.

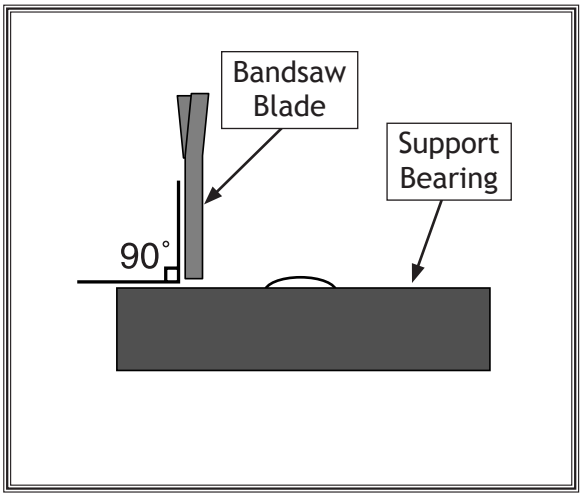


Figure 32. Illustration of blade set perpendicular (90˚) to the support bearing face.

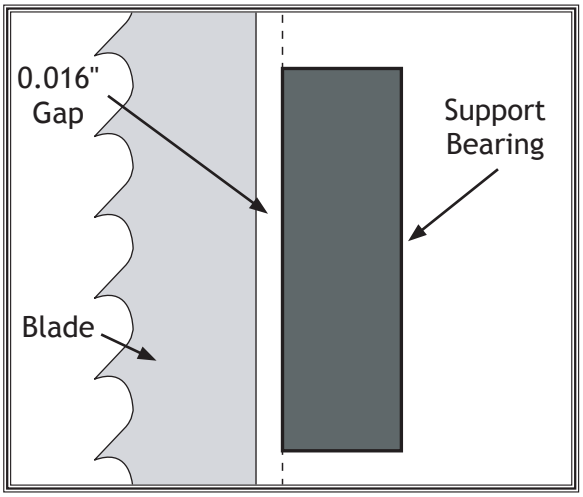


Figure 33. Blade aligned 0.016" away from the bearing edge.

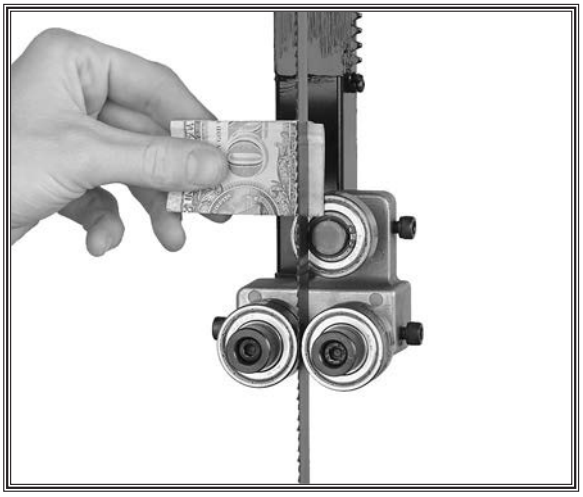


Figure 34. Example of dollar bill folded twice to make an approximate 0.016" gauge.

To adjust the lower support bearing, do these steps:

1. Make sure the blade is tracking properly and is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Familiarize yourself with the lower support bearing controls shown in **Figure 35**.

4. Open the upper and lower wheel covers.

5. Make sure that the blade is perpendicular to the face of the support bearing, as illustrated in **Figure 32** on **Page 25**.

   — If the blade is perpendicular to the face of the support bearing, continue with o the next step.

   — If the blade is not perpendicular to the support bearing, loosen the lateral adjustment rod cap screw and guide block cap screws (**Figure 31, Page 24**) and rotate the assembly side-to-side until it is perpendicular to the face of the support bearing, then re-tighten the cap screws.

6. Loosen the bolt on the support bearing adjustment shaft.

7. Using a feeler gauge, position the support bearing 0.016" away from the back of the blade, as illustrated in **Figure 33**, or use a dollar bill, as shown in **Figure 34** on **Page 25**.

8. Tighten the bolt to keep the support bearing locked in place.

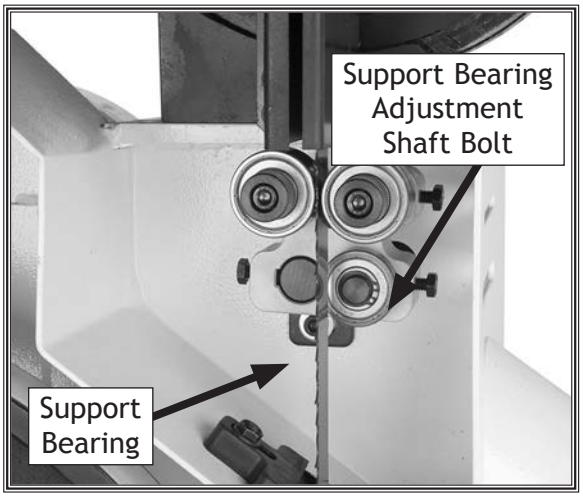


Figure 35. Lower support bearing controls.

Aligning Table

To ensure cutting accuracy, the table should be aligned so that the miter slot is parallel to the bandsaw blade. This procedure works best with a $1^{3}/_{8}$" blade installed.

To align the table so the miter slot is parallel to the bandsaw blade, do these steps:

1. Make sure that the blade is tracking properly and that it is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Loosen the four trunnion cap screws that secure the table to the trunnions (see **Figure 36**).

4. Place an accurate straightedge along the blade. The straightedge should lightly touch both the front and back of the blade (the flat part only) without touching the blade teeth.

5. Use a fine ruler to accurately gauge the distance between the straightedge and the miter slot. The distance you measure should be the same at both the front and the back ends of the miter slot, as indicated by positions "A" and "B" in **Figure 37**.

6. Adjust the table as needed until the distance between the blade and miter slot is equal at both ends.

7. Tighten the trunnion cap screws when the alignment is correct.

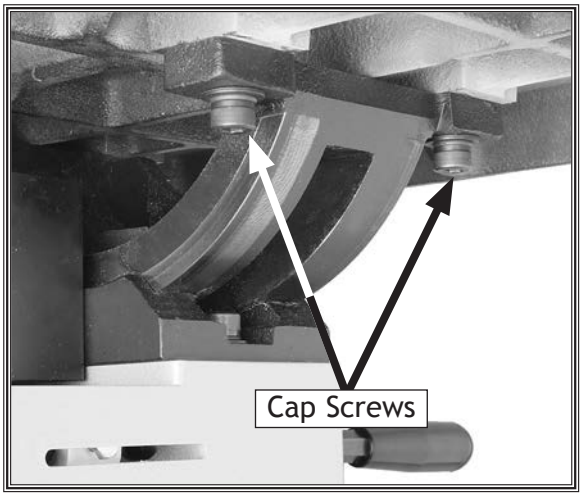


Figure 36. Cap screws securing table to trunnion.

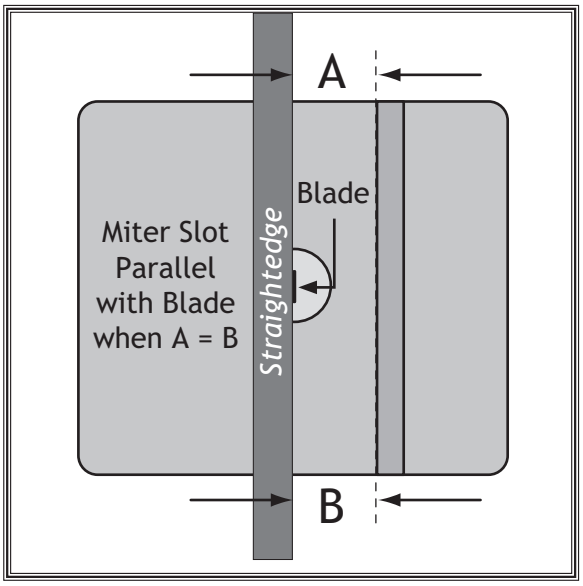


Figure 37. Checking if miter slot is parallel to blade.

Aligning Fence

To ensure cutting accuracy when the fence is first installed, the fence should be aligned with the miter slot.

To align the fence parallel with the miter slot, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Make sure the miter slot is aligned with the bandsaw blade (see **Page 27**).
3. If the fence is mounted on the left-hand side of the blade, remove it and remount it next to the miter slot.
4. Loosen the three cap screws that secure the rail to the table (see **Figure 38**).
5. Adjust the fence face parallel with the edge of the miter slot, as shown in **Figure 39**.
6. Tighten the cap screws that secure the rail to the table, being careful not to move the fence.

NOTICE

Adjusting the fence parallel to the miter slot does not guarantee straight cuts. The miter slot may need to be adjusted parallel to the side of the blade. Refer to the "Aligning Table" instructions on Page 27.

Figure 38. Cap screws securing rail to table.

Figure 39. Example of fence square with miter slot.

Calibrating Fence Pointer

Your new bandsaw is equipped with a fence measurement system that includes a fence pointer, which must be calibrated when the bandsaw is first set up.

To calibrate the pointer, do these steps:

1. If the fence is mounted on the right-hand side of the blade, remove it and re-install it on the left-hand side of the blade.

2. Place the fence flush against the bandsaw blade (see **Figure 40**).

3. Loosen the pointer adjustment screw (**Figure 41**), and set the pointer in line with "0" and the measurement scale on the table.

4. Tighten the pointer adjustment screw.

Figure 40. Example of fence flush with blade.

Figure 41. Fence pointer adjustment screw.

Calibrating Miter Gauge

The miter gauge needs to be calibrated to the blade when it is first mounted in the miter slot.

To calibrate the miter gauge, do these steps:

1. Place one edge of a machinist's square against the face of the miter gauge and place the other against the blade face, as shown in **Figure 42**.

2. Loosen the lock knob on the miter gauge and adjust the gauge flush with the edge of the square.

3. Tighten the lock knob, and verify the setting.

   Note: *Sometimes the tightening procedure can affect the adjustment.*

4. Loosen the screw that secures the angle pointer and adjust the pointer to the 0° mark on the scale.

5. Retighten the screw that secures the angle pointer.

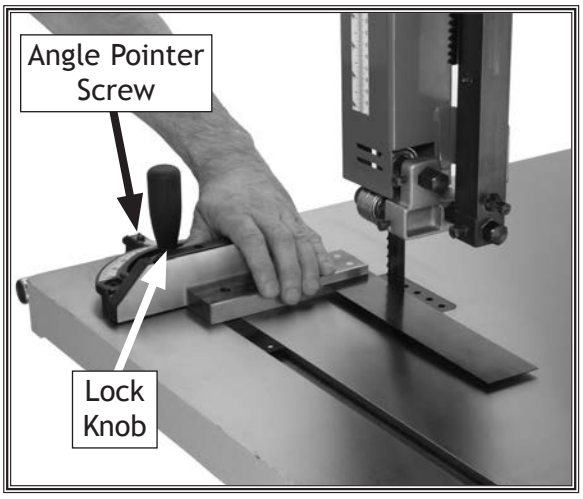


Figure 42. Example of squaring miter gauge to blade.

Installing Resaw Fence

To install the resaw fence, do these steps:

1. Install the resaw fence lock handle (with the washer and moving plate) onto the fence, then slide the resaw fence over the moving plate, as shown in **Figure 43**.

   Note: *Leave the moving plate and lock handle loose enough to slide on the resaw fence.*

2. Tighten the resaw lock handle.

3. Loosen the fence lock knob and place the fence assembly on the rail, as shown in **Figure 44**.

4. Tighten the fence lock knob to lock the fence assembly in place.

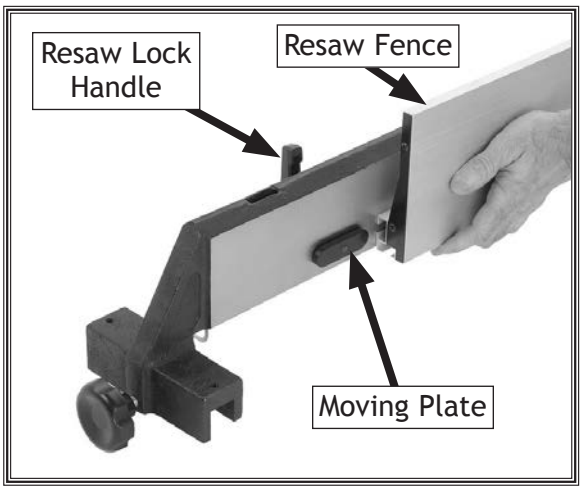


Figure 43. Attaching resaw fence to standard fence.

Figure 44. Resaw fence installed.

OPERATIONS

General

This machine will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

If you are an inexperienced operator, we strongly recommend that you read books or trade articles, or seek training from an experienced *bandsaw* operator before performing any unfamiliar operations. **Above all, your safety should come first!**

WARNING

READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

Basic Controls

Refer to **Figures 45-47** and the desriptions below to become familiar with the basic controls and components of your bandsaw.

Control Panel

Power Switch: Disables the ON and OFF button when the key is turned to the "0" position. Enables ON and OFF button when the key is turned to "1" position.

ON Button: Starts motor only if the OFF button is popped out and power switch key is turn to "1" position.

OFF Button: Disables the ON button. Enable the ON button by twisting the OFF button until it pops out.

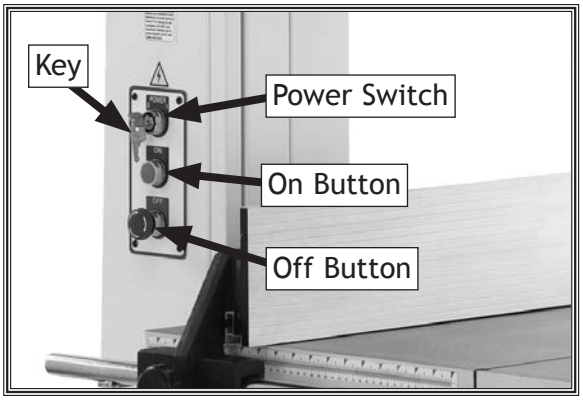


Figure 45. W1770 control panel features.

Front Controls (Figure 46)

A. Blade Tension Scale: Allows for easy monitoring of blade tension.

B. Blade Tension Handwheel: Tensions blade in gradual increments.

C. Blade Tracking Window: Allows for easy monitoring of blade tracking (refer to **Page 36**).

D. Fence, Rails, and Miter Gauge: Allows for controlled cutting at various angles.

E. Foot Brake: Cuts power to motor and allows bandsaw blade to be quickly brought to a stop.

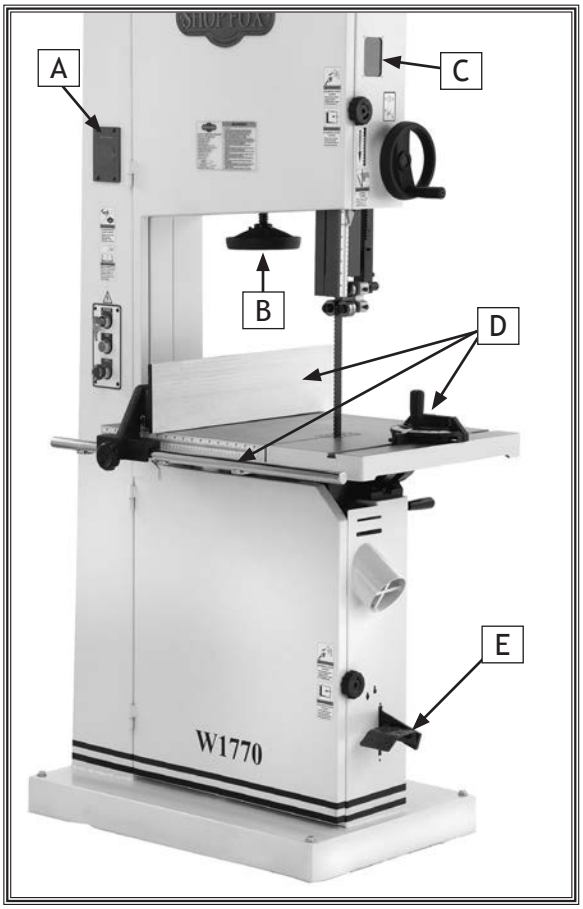


Figure 46. Front controls.

Rear Controls (Figure 47)

F. Guide Post Handwheel and Lock Knob: Moves blade guide support quickly to the desired height on the guide post; locks setting (refer to **Page 35**).

G. Blade Tracking Knob and Lock Lever: Moves and locks blade tracking.

H. Quick Release Blade Tension Lever: Adjusts blade tension for quick blade changes.

I. Table Tilt Handwheel: Tilts the table up to 5° to the left or 45° to the right (refer to **Page 38**).

J. Table Tilt Lock Lever: Locks or unlocks the table at the current angle.

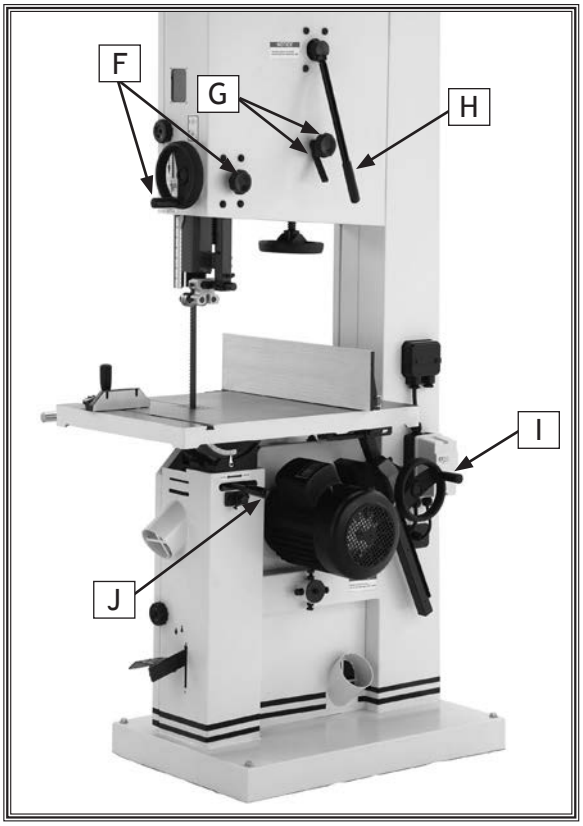


Figure 47. Rear controls.

Workpiece Inspection

Some wood workpieces are not safe to cut or may require modification before they are safe to cut.

Before cutting wood, get in the habit of inspecting all workpieces for the following:

- **Foreign Objects (Figure 48):** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, do NOT cut the workpiece.

- ***Large/Loose Knots:*** Loose knots can become dislodged during the cutting operation. Large knots can cause blade damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.

- ***Wet or "Green" Stock:*** Cutting wood with a moisture content over 20% causes unnecessary wear on the blade and yields poor results.

- ***Excessive Warping:*** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and can move unpredictably when being cut. DO NOT cut excessively warped wood.

- ***Minor Warping:*** Workpieces with slight cupping can be safely supported if the cupped side faces the table or fence, as shown in **Figure 49**. On the contrary, a workpiece supported on the bowed side will rock during a cut, leading to loss of control.

⚠WARNING

Because of its unpredicatable nature, use extreme caution if cutting warped stock. The difference between acceptable and unacceptable warped stock varies from machine to machine. If you are in doubt, square-up the stock first or do not cut it.

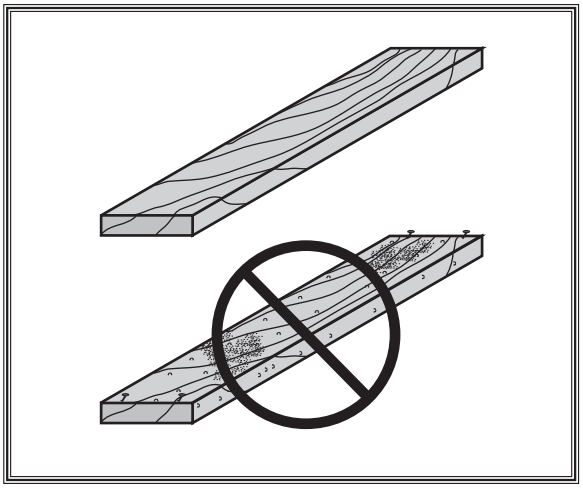


Figure 48. Choosing wood without foreign objects embedded.

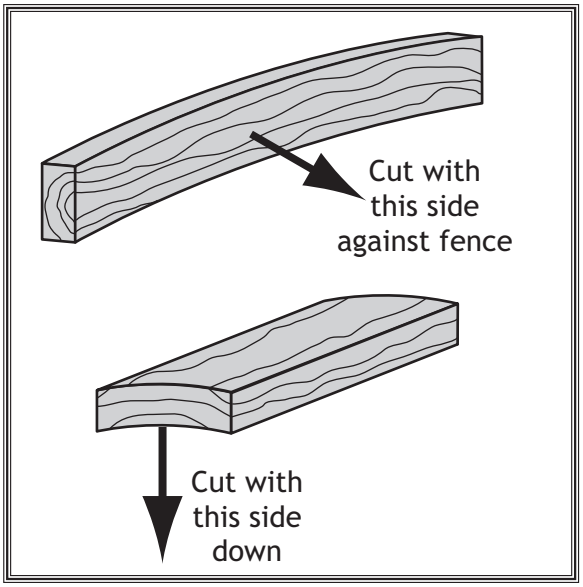


Figure 49. Cutting wood with minor warping.

Cutting Overview

The bandsaw is capable of performing the following cuts:

- Miters
- Angles
- Compound Angles
- Resawing
- Ripping
- Crosscutting
- Simple and Complex Curves
- Duplicate Parts
- Circles
- Beveled Curves

Basic Cutting Tips

- Keep the upper blade guide assembly adjusted to within 1" of the workpiece.

- Replace, sharpen, and clean blades as necessary. Make adjustments periodically to keep the saw running in top condition.

- Use light and even pressure while cutting. Light contact with the blade makes it easier to follow lines and prevents extra friction, which reduces blade life.

- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw around the corners.

- Do not back the workpiece away from the blade while the saw is running.

- Misusing the saw or using incorrect techniques is unsafe and results in poor cuts. Remember—the blade does the cutting with the operator's guidance.

- Do not start the machine with the workpiece touching the blade.

Foot Brake

The Model W1770 is equipped with a foot brake (**Figure 50**). Use the brake to cut power to the motor and bring the blade to a halt.

NOTICE

The foot brake will not stop the bandsaw wheels and blade instantly. DO NOT become over confident and relax your safety awareness because of the foot brake feature. Make sure the bandsaw blade has stopped moving completely before leaving the machine.

Figure 50. Foot brake location.

Guide Post

The guide post, shown in **Figure 51**, connects the upper blade guide assembly to the bandsaw. The guidepost allows the blade guide assembly to move up or down to be as close to the workpiece as possible. In order to cut accurately and safely, the bottom of the blade guide assembly must be no more than 1" above the workpiece at all times—this positioning provides the greatest blade support and minimizes the amount of moving blade exposed to the operator.

To adjust the blade guide assembly on the guide post, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure that the blade tension, blade tracking, support bearings, and blade guides are adjusted correctly.

3. Loosen the guide post lock knob shown in **Figure 51**.

4. Turn the guide post handwheel to raise or lower the guide post until the upper blade guide assembly is within 1" from the top of the workpiece.

5. Lock the guide post in place with the lock knob.

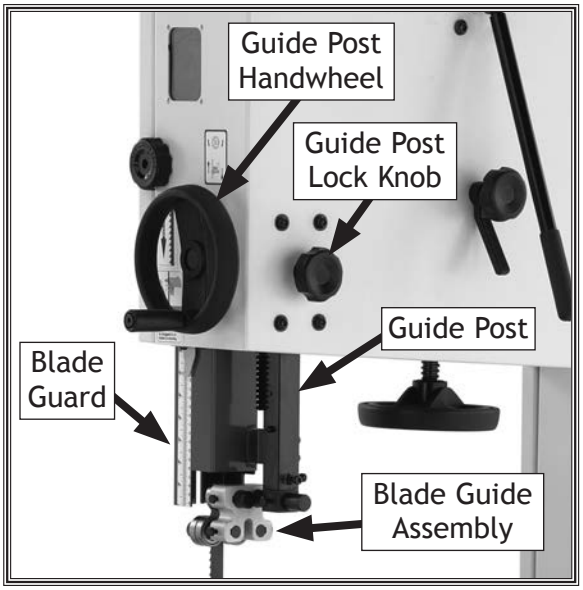


Figure 51. Guide post controls.

Fine Tune Tracking

NOTICE

Adjusting the final blade tracking setting requires the machine to be turned *ON*.

To fine tune the tracking, do these steps:

1. Close the wheel covers and turn the bandsaw ***ON***.

2. Observe the blade tracking path through the clear window on the right edge of the bandsaw, as shown in **Figure 52**.

3. Using the tracking controls (**Page 17**, **Figure 18**), adjust the blade so it tracks on the center of the wheel.

4. Tighten the blade tracking lock lever so the tracking knob cannot move.

Figure 52. Blade tracking window.

Blade Lead

Bandsaw blades commonly wander off the cut line when sawing, as shown in **Figure 53**. This is called blade lead. Blade lead is commonly caused by too fast of a feed rate, a dull or abused blade, or improper tension. If your blade is sharp/undamaged and you still have blade lead, perform the following instructions.

Figure 53. Example of blade leading away from line of cut.

Correcting Blade Lead

1. Use less pressure when feeding the workpiece through the cut.

2. Check that the miter slot or fence is parallel to the blade line, and correct if necessary (refer to **Aligning Table** on **Page 27** and **Aligning Fence** on **Page 28**).

3. Check for proper blade tension. If the blade tension is correct and it is not convenient to replace the blade, compensate for lead by skewing the fence or adjusting the table, as explained below.

To skew your fence, do these steps:

1. Cut a piece of scrap wood approximately $^{3}/_{4}$" thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.

2. Slide the bandsaw fence out of the way and cut halfway through the board on the line by pushing it into the blade. Turn the bandsaw ***OFF*** and wait for the blade to stop.

3. Clamp the board to the bandsaw table without moving it. Now slide the fence over to the board so it barely touches one end of the board.

4. Loosen the three cap screws that secure the fence rail to the underside of the table (see **Page 28**).

5. Skew the fence so it is parallel to the edge of the scrap piece.

6. While maintaining the skew, tighten the cap screws loosened in **Step 4**.

7. Make a few cuts using the fence. If the fence still does not seem parallel to the blade, repeat **Steps 1-6** until the blade and fence are parallel with each other.

To shift the table, do these steps:

1. On a scrap piece of wood, mark a line that is perpendicular to the front edge.

2. Cut halfway through the board on the line by pushing it into the blade.

3. Turn the bandsaw ***OFF*** and wait for the blade to stop.

4. Loosen the four cap screws that mount the table to the trunnion (**Figure 36** on **Page 27**). Shift the table to compensate for the blade lead, then retighten the cap screws.

5. Repeat **Steps 1-4** until the blade cuts straight.

Table Tilt

To tilt the table, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Loosen the table tilt lock lever shown in **Figure 54**.
3. To tilt the table to the right, turn the table tilt handwheel clockwise (**Figure 54**).
4. To tilt the table to the left, turn the table tilt handwheel clockwise one turn, lower the positive stop bolt, then turn the handwheel counterclockwise.
5. Secure the table tilt lock lever.
6. Follow **Positive Stop** instructions on **Page 18** for resetting the stop bolt and table for horizontal (0°) operations.

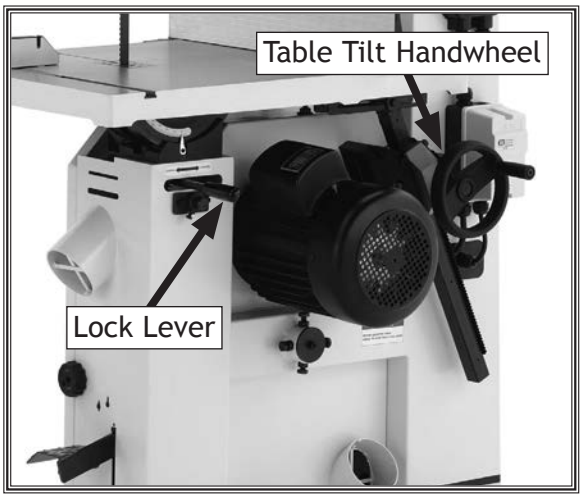


Figure 54. Table tilt controls.

Rip Cutting

Ripping is the process of cutting with the grain of the wood stock. For plywood and other processed wood, riping simply means cutting down the length of the workpiece. For ripping, a wider blade is better. In most ripping applications, a standard raker tooth style will be sufficient.

To make a rip cut, do these steps:

1. Adjust the fence to match the width of the cut on your workpiece, then lock the fence in place.
2. Adjust the blade guide assembly to less than 1" above the workpiece.
3. After all safety precautions have been met, turn the bandsaw ***ON***. Slowly feed the workpiece into the blade and continue with the cut until the blade is completely through the workpiece. **Figure 55** shows a typical ripping operation.

   Note: *If you cut narrow pieces, use a push stick to protect your fingers.*

Figure 55. Typical rip cut.

⚠WARNING

NEVER place fingers or hands in the line of cut. If you slip, your hands or fingers may go into the blade. ALWAYS use a push stick when ripping narrow pieces. Failure to follow these warnings may result in serious personal injury!

Crosscutting

"Crosscutting" means cutting across the grain of wood. For plywood and other processed wood, crosscutting simply means cutting across the width of the material.

To make a 90° crosscut, do these steps:

1. Move the fence out of the way, adjust the blade guide assembly to less than 1" above the workpiece, and make sure the miter gauge is set to 90°.

2. Mark the workpiece on the edge where you want to begin the cut, place the workpiece evenly against the miter gauge, and align the mark with the blade.

3. After all safety precautions have been met, turn the bandsaw ***ON***. Slowly feed the workpiece into the blade and continue the cut until the blade is all the way through the workpiece. **Figure 56** shows a typical crosscutting operation.

Figure 56. Typical crosscutting operation.

Resawing

"Resawing" (**Figure 57**) is cutting a workpiece into two or more thinner workpieces. Use the widest blade possible when resawing—a wide blade cuts straighter and is less prone to blade lead (see **Page 36**). For most applications, use a blade with a hook- or skip-tooth style. Choose blades with fewer teeth-per-inch (from 3 to 6), because they offer larger gullet capacities for clearing sawdust, reducing heat buildup and reducing strain on the motor.

To resaw a workpiece, do these steps:

1. Verify that the bandsaw is setup properly and that the fence is parallel to the blade.

2. Adjust the upper blade guide so it is about 1" above the workpiece with a minimum amount of blade exposed.

3. Install the resaw fence, set it to the desired width of cut, and lock it in place.

4. Support the ends of the board if necessary.

5. Turn the bandsaw ***ON***.

6. Using push paddles and a push stick, keep pressure against the fence and table, and slowly feed the workpiece into the moving blade (**Figure 57**) until the blade is completely through the workpiece.

⚠WARNING

When resawing thin pieces, a wandering blade (blade lead) can tear through the surface of the workpiece, exposing your hands to the blade teeth. Always use push blocks when resawing and keep your hands clear of the blade.

NOTICE

The scale on the front rail will NOT be accurate when using the resaw fence.

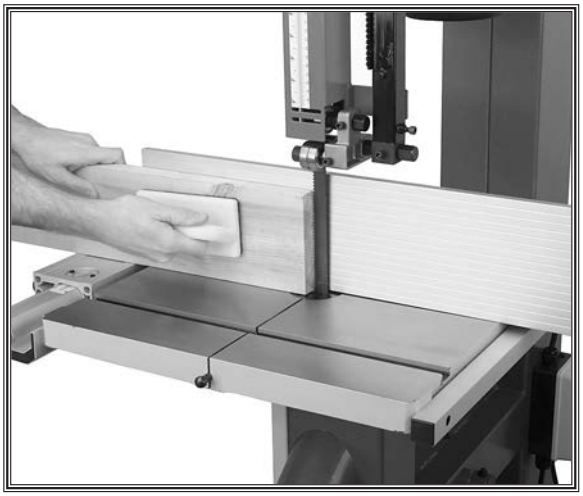


Figure 57. Example of resawing lumber.

Cutting Curves

When cutting curves, simultaneously feed and turn the stock carefully so the blade follows the layout line without twisting. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, use a narrower blade (refer to **FIgure 58**), a blade with more TPI (teeth per inch), or make more relief cuts.

Relief cuts are made through the waste portion of the workpiece and stop at the layout line. Relief cuts reduce the chance that the blade will be pinched or twisted during the cut.

The list below shows the minimum radius that can be cut by common blade widths.

Width	Radius
1/8"	1/8"
3/16"	3/8"
1/4"	5/8"
3/8"	1 1/4"
1/2"	2 1/2"
5/8"	3 3/4"
3/4"	5 1/2"

Figure 58. Blade width cutting radii.

Stacked Cuts

One of the benefits of a bandsaw is its ability to cut multiple copies of a particular shape by stacking workpieces together and cutting them as one. Before making stacked cuts, ensure that both the table and the blade are properly adjusted to 90°; otherwise, any error will be compounded.

To complete a stacked cut, do these steps:

1. Align your pieces from top-to-bottom to ensure that each piece has adequate scrap to provide a clean, unhampered cut.

2. Secure all the pieces together in a manner that will not interfere with the cutting. Hot glue on the edges works well, as do brad nails through the waste portion. (Be careful not to cut into the brads or you may break the blade!)

3. On the face of the top piece, mark the shape you intend to cut.

4. Make relief cuts perpendicular to the outline of your intended shape in areas where changes in blade direction could cause the blade to bind.

5. Cut the stack of pieces as though you were cutting a single piece. Follow your layout line with the blade kerf on the waste side of your line as shown in **Figure 59.**

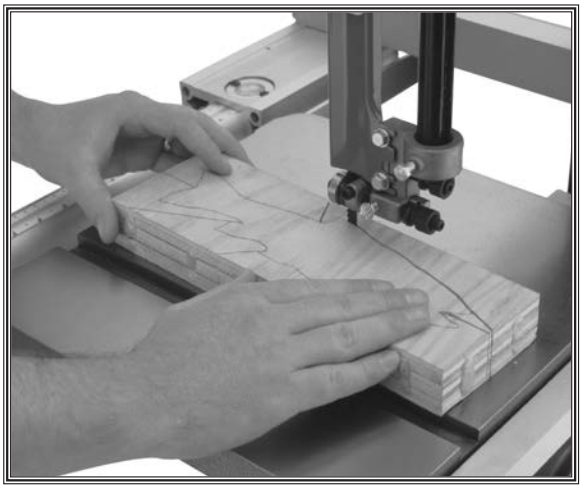


Figure 59. Typical stacked cut.

Blade Length

Measured by the circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between wheels. This saw uses 165" long blades.

Blade Width

Measured from the back of the blade to the tip of the blade tooth (the widest point), blade width is often the first consideration given to blade selection. Blade width dictates the largest and smallest curve that can be cut, as well as how accurately it can cut a straight line.

This saw uses blades from 1/4" to 1 3/8" in width. Always pick the size of blade that best suits your application.

- ***Curve Cutting:*** Use the chart in **Figure 60** to determine the correct blade for curve cutting. Determine the smallest radius curve that will be cut on your workpiece and use the corresponding blade width.

- ***Straight Cutting:*** Use the largest width blade that you own. Large blades excel at cutting straight lines and are less prone to wander.

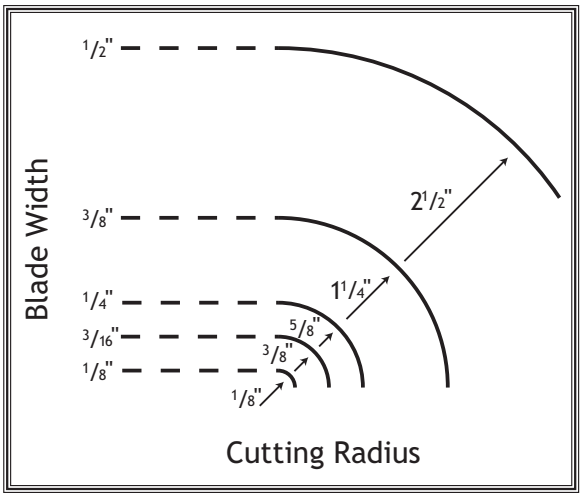


Figure 60. Blade width cutting radii.

Tooth Style

Figure 61 illustrates the three main tooth styles:

- ***Raker:*** Considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on raker blades usually are very numerous, have no angle, and produce cuts by scraping the material; these characteristics result in very smooth cuts, but do not cut fast and generate more heat than other types while cutting.

- ***Skip:*** Similar to a raker blade that is missing every other tooth. Because of the design, skip toothed blades have a much larger gullet than raker blades, and therefore, cut faster and generate less heat. However, these blades also leave a rougher cut than raker blades.

- ***Hook:*** The teeth have a positive angle (downward) which makes them dig into the material, and the gullets are usually rounded for easier waste removal. These blades are excellent for the tough demands of resawing and ripping thick material.

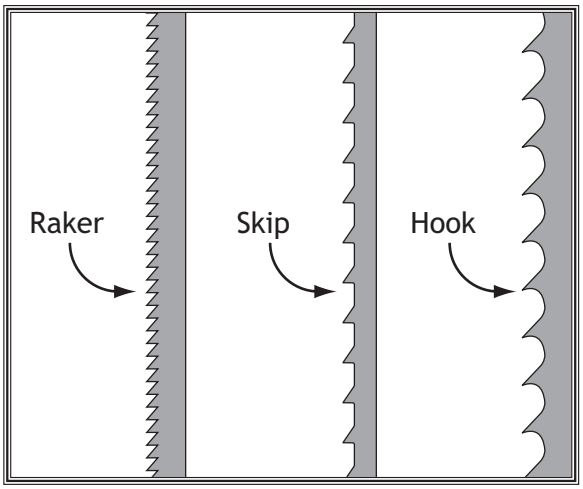


Figure 61. Raker, Skip & Hook tooth styles.

Tooth Pitch

Usually measured as TPI (teeth per inch), tooth pitch determines the size/number of the teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster. As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine pitched blades on harder woods and coarse pitched blades on softer woods.

Blade Care

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain longer use from a bandsaw blade if you give it fair treatment and always use the appropriate feed rate for your operation. Be sure to select blades with the proper width, style, and pitch for each application. The wrong choice of blades will often produce unnecessary heat which will shorten the life of your blade.

A clean blade will perform much better than a dirty blade. Dirty or gummed up blades pass through the cutting material with much more resistance than clean blades. This extra resistance also causes unnecessary heat. Resin/pitch dissolving cleaners are excellent for cleaning dirty blades.

Blade Breakage

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable, in some cases, since it is the natural result of the peculiar stresses that bandsaw blades must endure. Blade breakage is also due to avoidable circumstances. Avoidable breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

The most common causes of blade breakage are:

- Faulty alignment/adjustment of the guides.
- Forcing/twisting a wide blade around a short radius.
- Feeding the workpiece too fast.
- Dull teeth or damaged tooth set.
- Overtensioned blade.
- Top blade guide assembly set too high above the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.
- Leaving blade tensioned when not in use.
- Using the wrong TPI for the workpiece thickness. (The general rule of thumb is three teeth in the workpiece at all times.)

Blade Changes

To remove a blade, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Release the blade tension.
3. Remove the table insert and the table pin. Adjust the upper and lower guide bearings as far away as possible from the blade.
4. Open the upper and lower wheel covers, and wearing heavy leather gloves, slide the blade off of both wheels.
5. Slide the blade through the slot in the table.

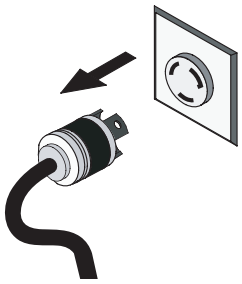
To replace a blade, do these steps:

1. Slide the blade through the table slot, ensuring that the teeth are pointing forward and down toward the table.

   Note: *If the teeth will not point downward in any orientation, the blade is inside-out. Put on heavy gloves, remove the blade, and twist it right side-out.*

2. Slip the blade through the guides, and mount it on the upper and lower wheels (see **Figure 62**).
3. Adjust tension as described on **Page 22**.
4. Adjust blade tracking if needed (refer to **Page 17**).
5. Adjust the upper/lower guide bearings and the support bearings (refer to **Page 23**).
6. Replace the table insert and table pin.
7. Close the wheel covers.

⚠WARNING



Always disconnect power to the machine when changing blades. Failure to do this may result in serious personal injury.

⚠CAUTION

All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling saw blades.

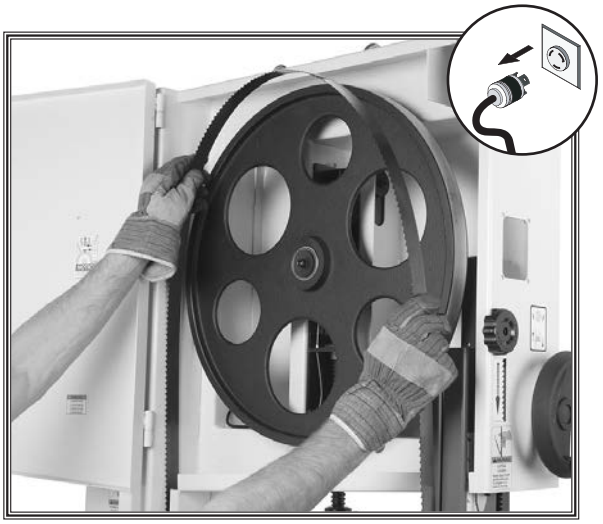


Figure 62. Typical example of placing blade on the wheels.

MAINTENANCE

General

For optimum performance from your machine, follow this maintenance schedule:

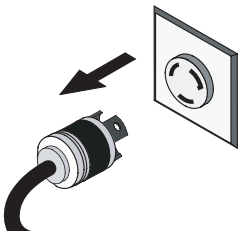
Daily

- Check/correct loose mounting bolts.
- Check/correct damaged saw blade.
- Check/correct worn or damaged wires.
- Correct any other unsafe condition.

Monthly

- Check for V-belt tension, damage, or wear.
- Remove blade and thoroughly clean all built-up sawdust from the rubber tires on the wheels.
- Clean/vacuum dust buildup from inside cabinet and off motor.

WARNING



MAKE SURE that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

Cleaning

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Table & Base

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep the table rust-free with regular applications of general lubricants.

If the table becomes difficult to tilt, remove it and lubricate the trunnion and the slides in the trunnion base with multi-purpose grease (see **Page 46**).

Brushes

The bandsaw is equipped with two lower brushes. The brushes should be checked daily and cleaned when they become dirty. There are adjustment brackets that allow the brushes to be adjusted for bristle wear. Refer to **Adjusting Brushes** on **Page 50** for adjustment details.

Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.

This machine does need lubrication in other places. Do not over-lubricate. Too much lubrication will attract dirt and sawdust. Lubricate the following areas as needed to maintain smooth function of the bandsaw.

Continued on next page

Blade Guide Rack and Pinion

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

To lubricate the blade guide rack and pinion, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Lower the blade guide until it reaches the table.
3. Using a rag and mineral spirits, wipe off any existing grease and sawdust buildup on the rack (see **Figure 63**).
4. Apply a thin coat of multi-purpose GL2 grease to the rack.
5. Move the blade guide up and down several times and remove any excess grease to help prevent sawdust buildup.

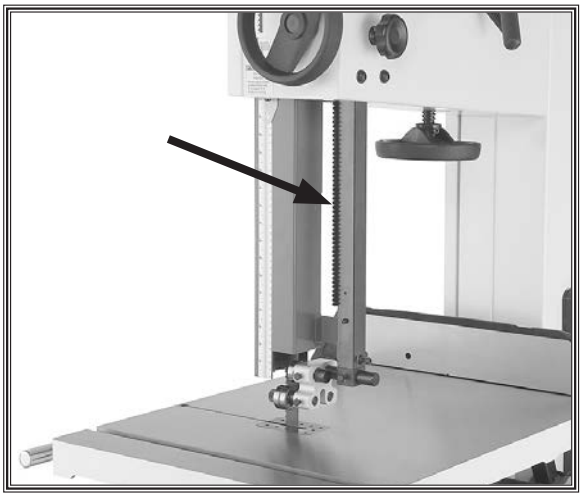


Figure 63. Rack lubrication location.

Tension Adjustment Assembly

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

To lubricate the tension adjustment assembly, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the top wheel cover and look through the top of the wheel.
3. Using a rag and mineral spirits, wipe off any existing grease and sawdust buildup on the blade tension adjustment assembly and tension lever cam.
4. Apply a thin coat of multi-purpose GL2 grease to the tension adjustment assembly and tension lever cam (see **Figure 64**).

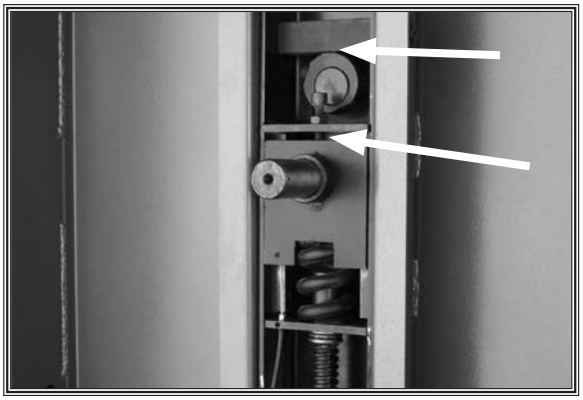


Figure 64. Tension adjustment assembly locations (top wheel removed for clarity).

Table Tilt Rack and Pinion Assembly

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

To lubricate the table tilt rack and pinion assembly, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. With the table perpendicular to the blade, and using a rag and mineral spirits, wipe off all existing grease and sawdust buildup from the rack.
3. Move the table up to its maximum 45° angle and wipe (**Figure 65**) off all existing grease and sawdust buildup from the rack.
4. Apply a thin coat of muilti-purpose grease to the rack.
5. Move the table up and down several times to distribute the grease, then wipe off any excess grease.

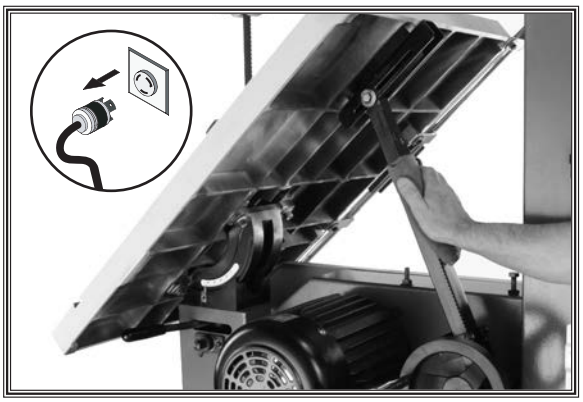


Figure 65. Table tilt rack and pinion assembly.

Trunnion

Lubricant	Frequency	Quantity
Multi-Purpose GL2 Grease	As Needed	Thin Coat

To lubricate the trunnion, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Move the table up until it reaches its maximum 45° angle, and using a rag and mineral spirits, wipe off all excess grease and sawdust from the trunnion.
3. Apply a thin coat of light all purpose grease to the outside surfaces of the trunnion (**Figure 66**).
4. Move the table down and then back up to distribute the grease, then wipe off any excess grease from the trunnion.

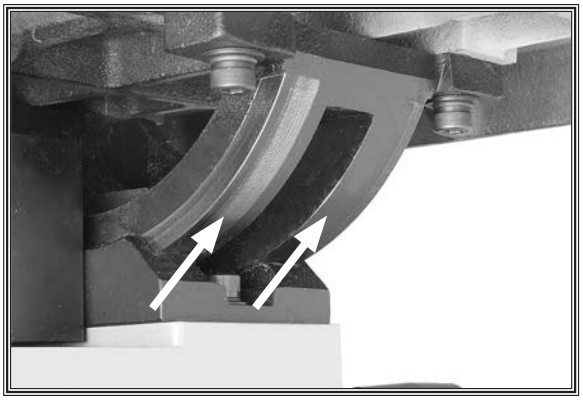


Figure 66. Trunnion lubrication location.

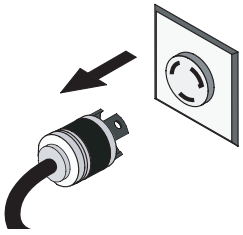
SERVICE

General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: **tech-support@shopfox.biz**.

WARNING



MAKE SURE that your machine is unplugged during all service procedures! If this warning is ignored, serious personal injury may occur.

Checking and Tensioning V-Belts

To ensure optimum power transmission from the motor to the blade, the V-belts must be in good condition and operate under proper tension. The belts should be checked for cracks, fraying, and wear. Belt tension should be checked at least every 3 months—more often if the bandsaw is used daily.

Tools Needed:	**Qty**
Ruler	1
Hex Wrench 6mm	1
Wrench 17mm	1

Checking V-Belts

1. DISCONNECT BANDSAW FROM POWER!
2. Open the wheel covers.
3. Note the condition of the V-belts. If the V-belts are cracked, frayed, or glazed; they should be replaced.
4. Push the center of the V-belts. Note the amount of deflection (**Figure 67**). If deflection is more than $^{3}/_{4}$", tension the V-belt.

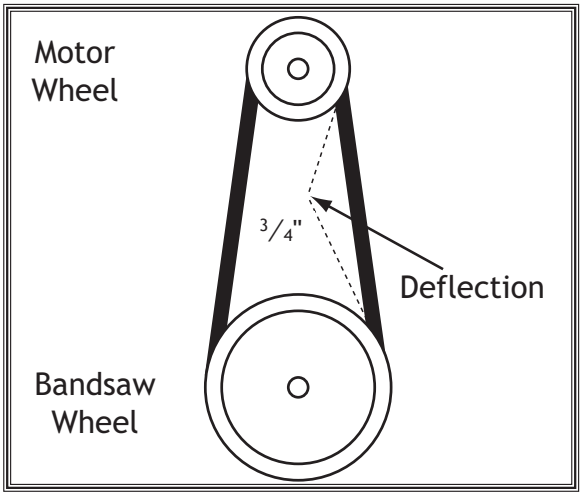


Figure 67. V-belt deflection.

Tensioning V-Belts

1. Follow **Steps 1-2** in **Checking V-Belts** on **Page 47**.

2. Loosen the motor adjustment screws shown in **Figure 68**.

3. Adjust the belt tension:

   — If the belt is too loose, turn the tension nut clockwise to tighten the belts.

   — If the belt is too tight, turn the tension nut counterclockwise to loosen the belts.

4. Push the center of the V-belt. If deflection is approximately 3/4" with moderate pressure (see **Figure 67**) **Page 47**), then the tension is correct. If the deflection is more than 3/4", repeat **Step 3**.

5. When the V-belt tension is correct, tighten the motor adjustment screws, and close the wheel covers.

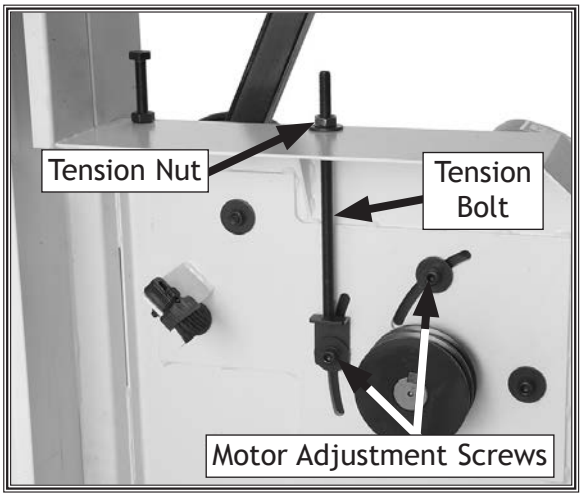


Figure 68. Motor mount bolts and tension bolt. (Lower wheel removed for clarity.)

Replacing V-Belts

1. Follow **Steps 1-2** in **Checking V-Belts** on **Page 47**.

2. Remove the bandsaw blade (refer to **Blade Changes** on **Page 43**).

3. Loosen the motor adjustment bolts and tension nut shown in **Figure 68**, then turn the tension bolt counterclockwise.

4. Unthread the wheel cap screw shown in **Figure 69**, slide the lower wheel off of the bearing shaft.

5. Slip the old V-belts off the pulleys, then install the new V-belt set in their place.

   Note: *Replace both V-belts as a matched set*.

6. Install the lower wheel back onto the bearing shaft, tighten the wheel mount cap screw, then tension the V-belt (see **Tensioning V-Belts** on this page).

7. Close the lower wheel cover.

Figure 69. Wheel cap screw for removing the wheel.

Adjusting Tension Lever

The quick release tension lever is setup correctly for use with the preinstalled 165" blade. However, if you install a different length blade, you will need to adjust the tension lever adjustment screw so the quick release tension lever works correctly.

Tools Needed:	**Qty**
Hex Wrench 6mm	1
Wrench 13mm	2

To adjust the tension lever, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Open the wheel covers, remove the bandsaw blade, then install the new one (refer to **Blade Changes**, **Page 43**).

3. Loosen the jam nut on the tension adjustment screw 7-10 turns.

4. Put the quick release tension lever in the down (engaged) position, then turn the blade tension handwheel until the blade tension matches the mark on the blade tension scale for the appropriate blade thickness.

5. Thread the tension adjustment screw (**Figure 70**) down until it contacts the wheel block plate, then back it off 1-2 turns.

6. Tighten the jam nut.

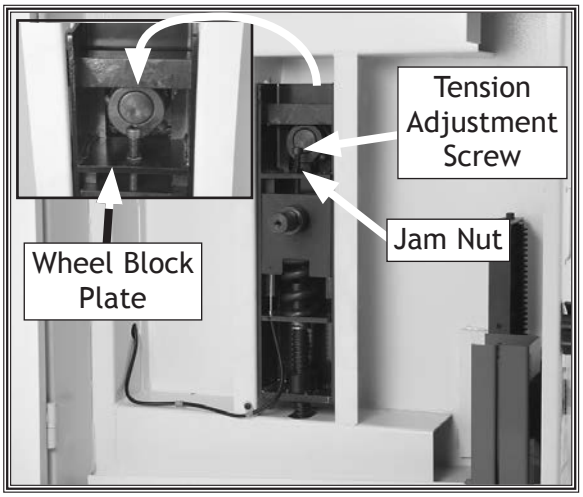


Figure 70. Quick release tension lever adjustment screw.

Adjusting Wheel and Blade Brushes

The lower wheel compartment contains the brushes shown in **Figure 71**. These brushes are designed to sweep sawdust off the wheel tire and blade as the bandsaw is operating. In order to work properly, the brushes must be making contact with the wheel and blade.

Tools Needed: **Qty**
Wrench/Socket 10mm.....2

To adjust the brushes, do these steps:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the lower wheel cover.
3. Loosen the bolt/nut that secures each brush in place.
4. Adjust each brush so it makes good contact with the wheel or blade—without bendng the bristles.
5. Tighten the bolt/nuts to secure each brush in place.

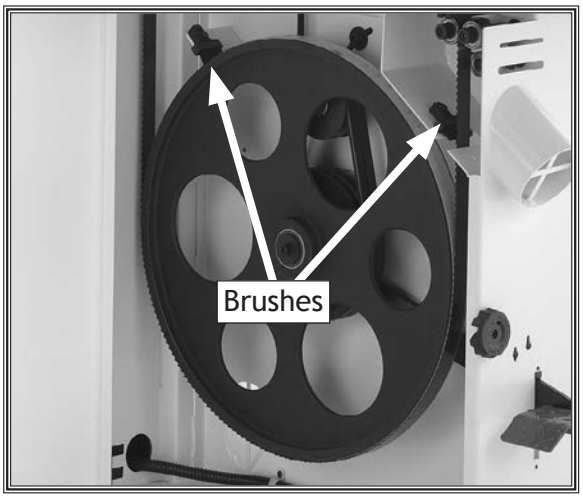


Figure 71. The wheel brushes.

Replacing Brake Shoe

The brake shoe will need to be replaced when the pad wears out, which depends upon how frequently the foot brake is used. The following are indications that the brake pad needs to be replaced: The bandsaw takes noticeably longer to stop when the foot brake is pushed or the foot brake makes metal-to-metal grinding sounds.

Contact Woodstock International Technical Support at (360) 734-3482 to order the replacement brake shoe, Part X1770536 (refer to **Page 64**).

Components and Hardware Needed:
Replacement Brake Shoe (Part X1770536) 1

Tools Needed:
Hex Wrench 5mm 1
Hex Wrench 6mm 1
Wrench 10mm 1
Wrench 17mm 1

To replace the brake shoe:

1. DISCONNECT BANDSAW FROM POWER!

2. Follow **Steps 1-4** in **Replacing V-Belts** on **Page 48**.

3. Remove the cap screws, lock washers, and bushings that secure the brake shoe to the brake lever, then remove the brake shoe (see **Figure 72**).

4. Install a new brake shoe onto the brake lever with the cap screws, lock washers, and bushings removed in **Step 3**.

5. Reinstall the V-belts onto the pulleys, then slide the lower wheel back onto the bearing shaft.

6. Tension the V-belts (see **Tensioning V-Belts**, on **Page 48**).

7. Reinstall the bandsaw blade, adjust blade tension and tracking, then adjust the upper and lower blade guides and support bearings as needed.

8. Close the wheel covers.

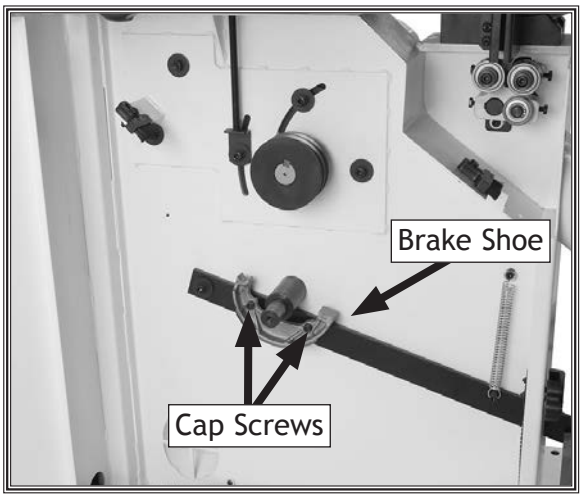


Figure 72. Brake shoe location.

Aligning Wheels

Components and Hardware Needed: **Qty**
70¼" Long Wood 2x4 1

Tools Needed:
Wrench 17mm 1
Tape Measure 1
Coplanarity Gauge (see **Figure 73**) 1
Straightedge 1
Fine Ruler 1

Wheel alignment is one of the most critical factors for optimal performance from your bandsaw.

Heat, vibration, wandering, blade wear, tire wear and overall bandsaw wear are considerably decreased when the wheels are properly aligned or "coplanar."

Coplanar wheels automatically track the blade by balancing it on the crown of the wheel. This is known as coplanar tracking.

Checking Coplanarity

1. Make the "Coplanarity Gauge" shown in **Figure 73**.

   Note: *For best results, straighten the 2x4 with a jointer before cutting.*

2. DISCONNECT BANDSAW FROM POWER!

3. Remove the fence and open both wheel covers.

4. Adjust the blade guides away from the blade, loosen blade tension, remove the table insert and pin, then remove the blade.

5. Remove the four trunnion cap screws and the table.

6. Reinstall the blade (**Page 43**), making sure the guide bearings and support bearings are away from the blade, then tighten your blade to the tension that it will be used during operation.

7. Place your coplanarity gauge up against both wheels in the positions shown in **Figure 74**.

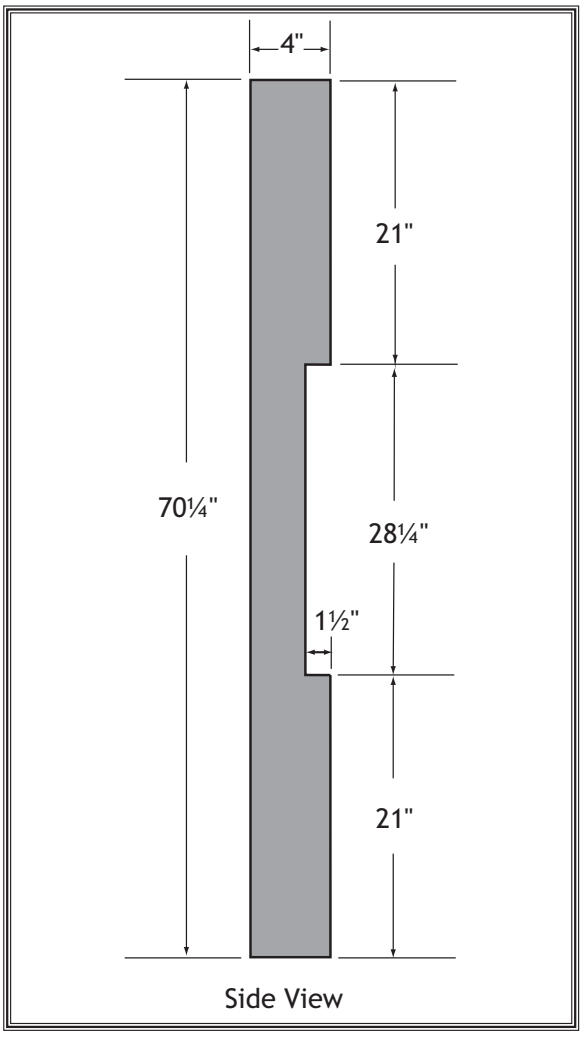


Figure 73. Dimensions of coplanarity gauge.

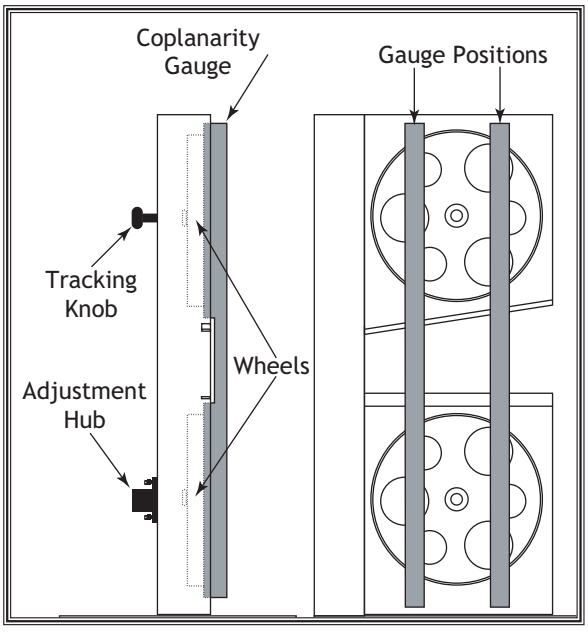


Figure 74. Checking for coplanarity.

SERVICE

— If the wheels are coplanar (**Figure 75**, **A**), the straightedge will evenly touch the top and bottom of both wheels.

— If the wheels are not coplanar (**Figure 75**, **B**), place the straightedge on the lower wheel first (ensuring that it touches both the top and bottom rim), then adjust the upper wheel tracking knob to make the upper wheel coplanar and parallel with the lower wheel.

— If the straightedge does not touch both wheels evenly, the lower wheel needs to be adjusted (**Figure 75, C**) or the upper wheel needs to be shimmed (**Figure 75, D**).

Shimming Upper Wheel

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure the top wheel is adjusted parallel with the bottom wheel.

3. With a straightedge touching both points of the wheel that does not need to be adjusted, measure the distance away from the wheel that is out of adjustment (see **Figure 76**).

4. Remove the blade from the saw, then remove the wheel that needs to be shimmed.

5. Determine how many shim washers you need to compensate for the distance measured in **Step 3** and place them on the wheel shaft.

6. Replace the wheel, the original washers, the securing screw, and the blade.

7. Tighten the blade, then check the wheels with the coplanarity gauge. (Wheel coplanarity changes as the blade is tightened, so it is best to check the wheel alignment when the blade is tensioned as it would be for normal operations.)

8. When the wheels are coplanar, place a mark on each wheel where you held the straightedge. This assures repeated accuracy every time you adjust your wheels.

Note: *When wheels are properly coplanar, the blade may not be centered on the crown of the wheel, but it will be balanced.*

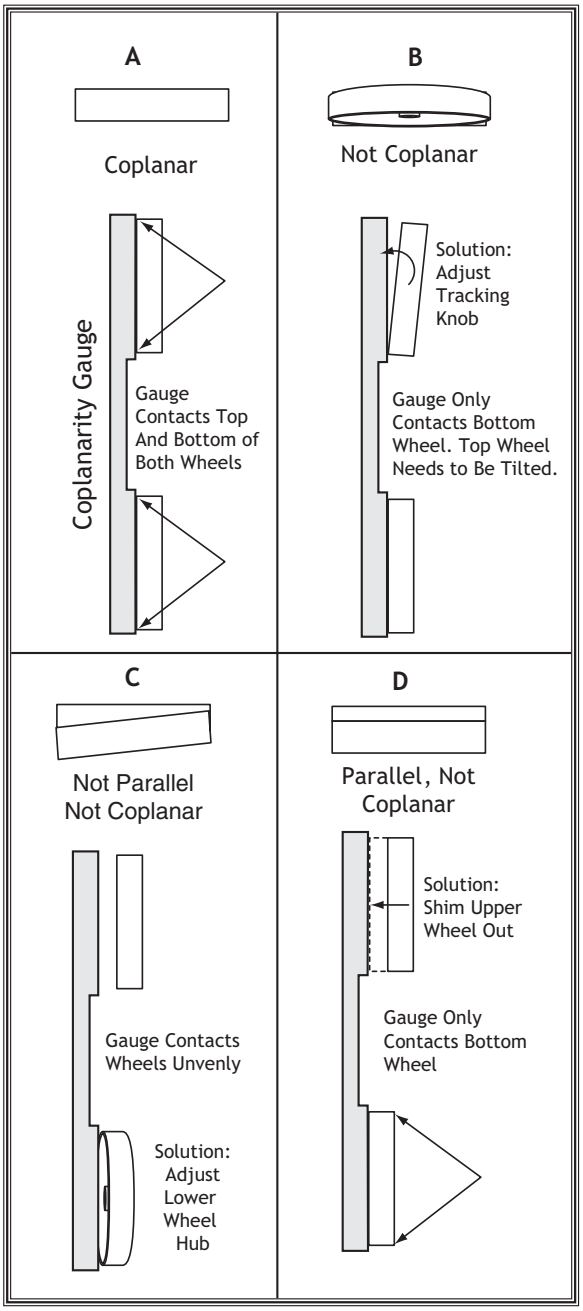


Figure 75. Coplanar diagram.

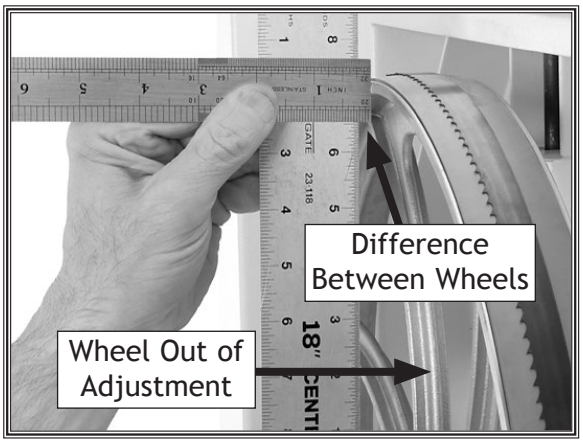


Figure 76. Determining distance needed to shim upper wheel.

Adjusting Lower Wheel

Only do this procedure if you cannot make the wheels coplanar with the tracking knob or by shimming the upper wheel. Make sure the upper wheel is adjusted as close as possible to being coplanar with the lower wheel before beginning. Do this procedure with the blade fully tensioned.

To adjust the lower wheel, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the jam nuts on the lower wheel adjustment hub (see **Figure 77**).

3. Loosen one tilt adjustment bolt, then tighten the opposing bolt approximately an equal amount.

4. Check the wheels with the coplanarity gauge, then adjust the lower wheel at the hub as needed until it is parallel and coplanar with the top wheel.

5. Tighten the jam nuts to lock the tilt adjustment bolts in position.

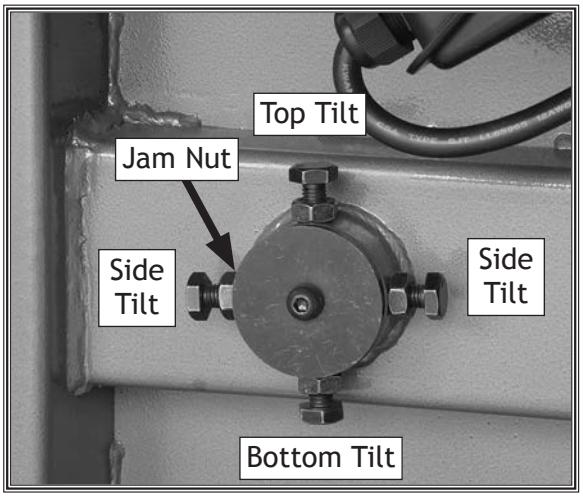


Figure 77. Lower wheel adjustment hub.

Electrical Components

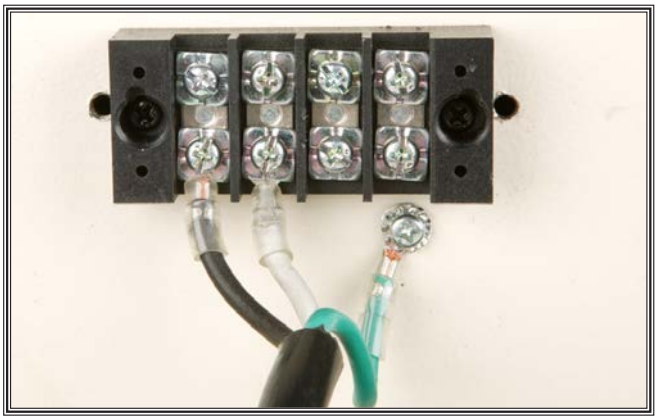


Figure 78. Power supply terminal box.

Figure 81. Motor wiring.

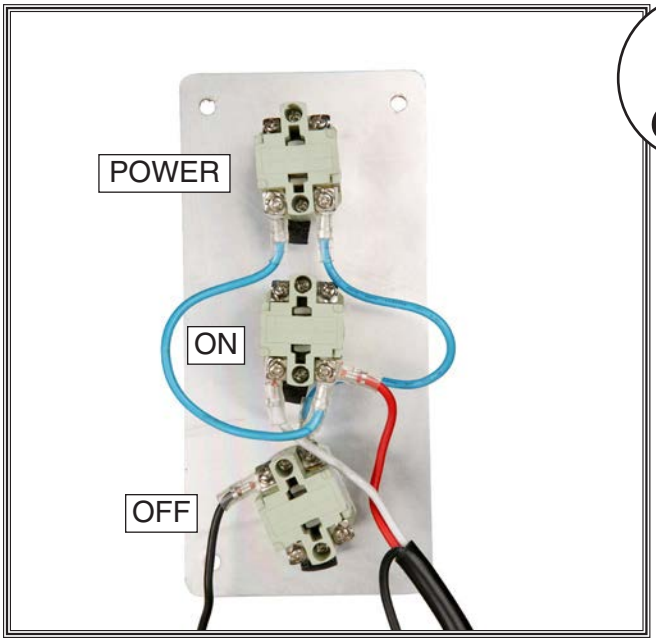


Figure 79. Control panel wiring.

Figure 80. Wheel cover limit switch (left) and foot brake switch (right).

Figure 82. Magnetic switch.

SERVICE

Wiring Diagram

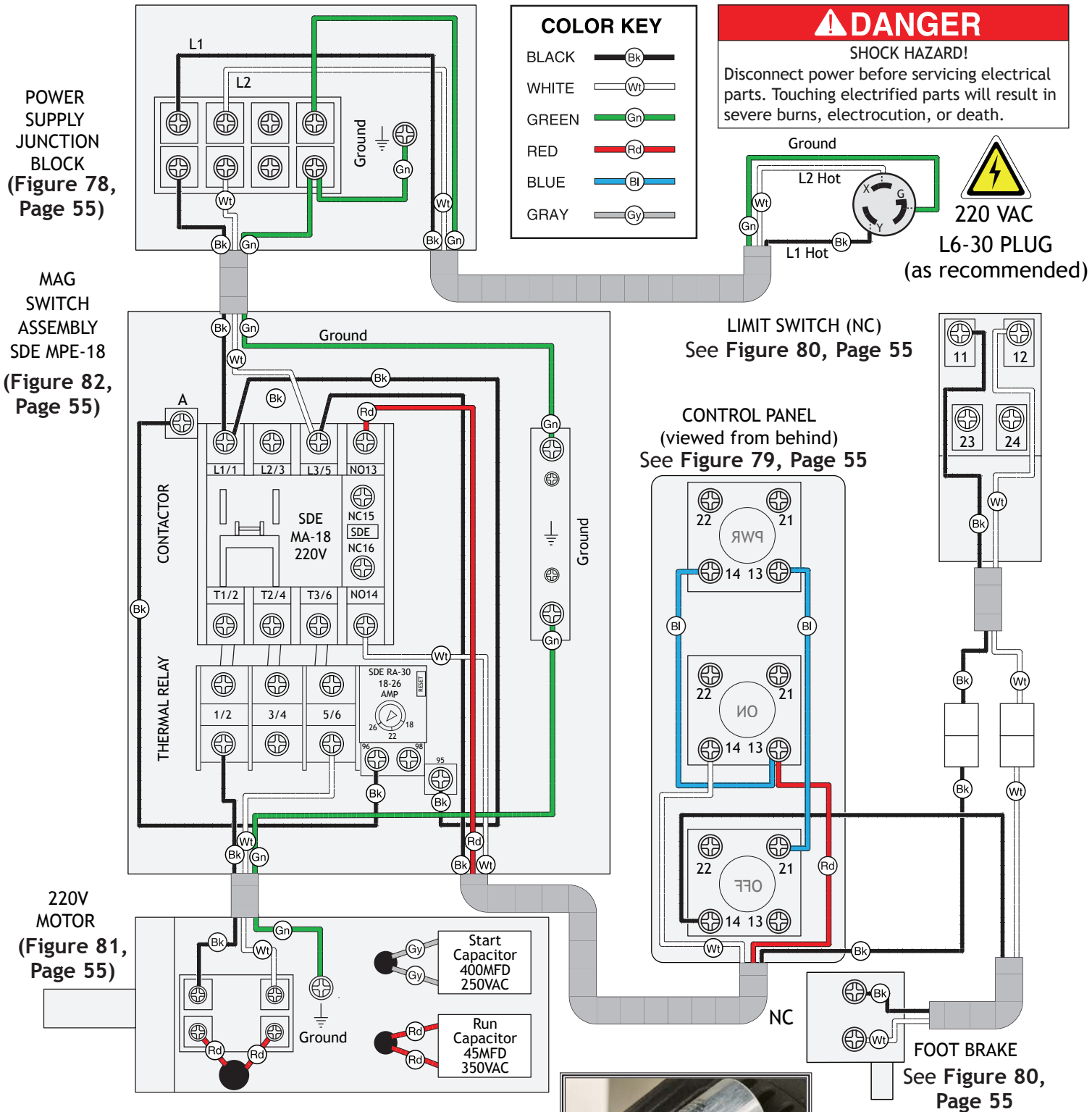
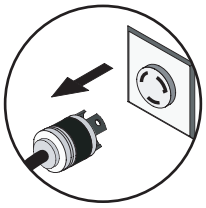


Figure 83. Capacitors.

SERVICE

Troubleshooting



This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT make any adjustments until power is disconnected and moving parts have come to a complete stop!**

Motor & Electrical

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	1. Key is turned to "0". 2. Stop/reset button engaged. 3. Plug/receptacle is at fault or wired incorrectly. 4. Motor connection wired incorrectly. 5. Thermal protection circuit breaker amperage is set too low or motor is at fault. 6. Power supply is at fault/switched OFF. 7. Motor ON/OFF switch is at fault. 8. Wiring is open/has high resistance. 9. Start capacitor is at fault. 10. Motor is at fault. 11. Wheel cover limit switch is not closed, wheel covers are open. 12. Foot brake limit switch is at fault or is pressed down (switch is not closed).	1. Turn key to "1". 2. Rotate clockwise until it pops out/replace. 3. Test for good contact or correct the wiring. 4. Correct motor wiring connections (**Page 56**). 5. Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amperage setting. If switch is maxed out, replace motor. 6. Ensure hot lines have correct voltage on all legs and main power supply is switched ON. 7. Replace faulty ON/OFF switch. 8. Check for broken wires or corroded/disconnected connections, and repair/replace as necessary. 9. Test/replace if faulty. 10. Repair/replace. 11. Close wheel covers. 12. Repair/replace limit switch, or stop pressing foot brake.
Machine stalls or is underpowered.	1. Wrong workpiece material. 2. Feed speed too fast for task. 3. V-belt slipping. 4. Blade is slipping on wheels. 5. Low power supply voltage. 6. Plug/receptacle is at fault. 7. Motor connection is wired incorrectly. 8. Motor bearings are at fault. 9. Motor has overheated. 10. Motor is at fault.	1. Use wood with correct moisture content, without glues, and little pitch/resins. 1. Decrease feed speed. See **Basic Cutting Tips** on **Page 34**. 3. Replace bad V-belt, align pulleys, and re-tension (**Page 47** & **48**). 4. Adjust blade tracking and tension to factory specifications. See **Page 17 or 22**. 5. Ensure all hot lines have correct voltage on all legs. 6. Test for good contacts and correct wiring. 7. Correct motor wiring connections (**Page 56**). 8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 9. Let motor cool, clean it off, and reduce workload. 10. Repair/replace.

Machine Operations

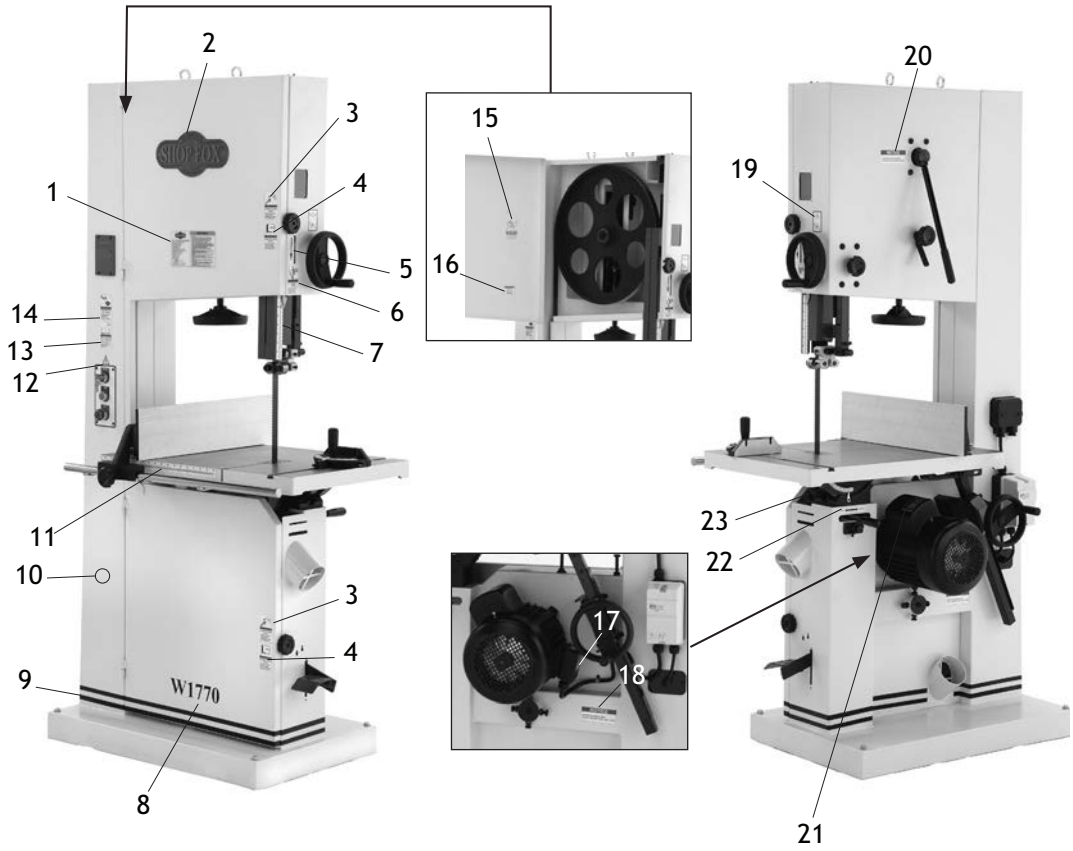
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine slows when operating.	1. Feeding workpiece too fast. 2. Blade is dull. 3. Brake is stuck or dragging on blade.	1. Reduce feed rate. See **Basic Cutting Tips** on **Page 34**. 2. Replace/sharpen blade (**Page 43**). 3. Adjust foot brake.
Ticking sound when the saw is running.	1. Blade weld contacting support bearing. 2. Blade weld may be failing.	1. Use file or stone to smooth and round the back of the blade. 2. Inspect and replace blade if necessary (**Page 43**).
Blade contacting table insert.	1. Excessive side pressure when cutting. 2. Table improperly adjusted.	1. Reduce side pressure. 2. Adjust table (**Page 27**).
Vibration when cutting.	1. Loose or damaged blade. 2. Blade is tracking incorrectly. 3. Blade tension is loose.	1. Tighten or replace blade. See **Page 43 or 22.** 2. Fix blade tracking (**Page 17**). 3. Fix blade tension (**Page 22**).
Burn marks on the edge of the cut.	1. Too much side pressure when feeding workpiece. 2. Blade too wide for size of radius being cut.	1. Feed workpiece straight into the blade. See **Basic Cutting Tips** on **Page 34**. 2. Install a smaller width blade/increase blade tension. See **Page 22 or 43**.
Machine has vibration or noisy operation when running.	1. Blade weld hits guides or teeth are broken. 2. Bent or worn out blade. 3. Motor or component is loose. 4. V-belt worn or loose. 5. Motor fan is rubbing on fan cover. 6. Pulley is loose. 7. Machine is incorrectly mounted or sits unevenly on floor. 8. Motor bearings are at fault. 9. Worn arbor bearings. 10. Wheels not coplanar/aligned correctly. 11. Wheels out of balance.	1. Replace blade (**Page 43**). 2. Replace blade (**Page 43**). 3. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 4. Inspect/replace belts with matched set (**Page 48**). 5. Replace dented fan cover and loose/damaged fan. 6. Realign/replace shaft, pulley, setscrew, and key as required. 7. Adjust the feet on the bottom of the stand; relocate machine. 8. Test by rotating shaft—rotational grinding/loose shaft requires bearing replacement. 9. Check/replace arbor bearings. 10. Adjust wheel alignment to coplaner (**Page 52**). 11. Replace wheels.
Rough or poor quality cuts.	1. Feeding workpiece too fast. 2. Tracking and tension incorrect.	1. Reduce feed rate. See **Basic Cutting Tips** on **Page 34**. 2. Fix tracking and tension (see **Page 17 and 22**).
Sawdust buildup inside cabinet.	1. Clogged dust port. 2. Low CFM (airflow) from dust collection system.	1. Clean out dust port. 2. Three options: —Check dust lines for leaks or clogs. —Move dust collector closer to saw. —Install a stronger dust collector.
Blade wanders or won't follow line of cut.	1. Blade lead.	1. Refer to Blade Lead on **Page 36**.
Brake does not slow or stop machine.	1. Bad shoes/pad is worn out. 2. Limit switch is defective.	1. Replace brake pad (see **Page 51**). 2. Replace foot brake limit switch.

PARTS

Labels & Cosmetic Parts

⚠WARNING

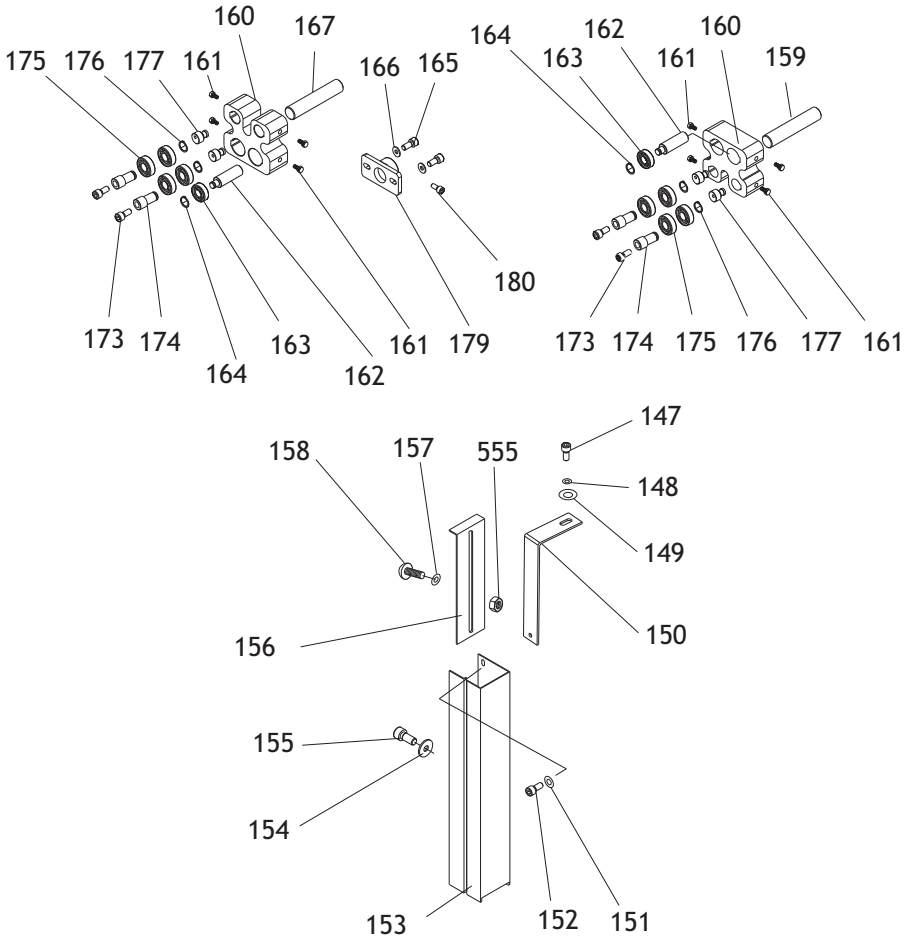
Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine MUST maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, REPLACE that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or www.shopfoxtools.com to order new labels.



REF	PART #	DESCRIPTION
1	X1770001	MACHINE ID LABEL
2	D3376	SHOP FOX LOGO PLATE
3	X1770003	DISCONNECT POWER LABEL HL
4	XLABEL-05	CLOSE DOOR LABEL
5	XLABEL-17	BLADE CUT DIRECTION LABEL
6	X1770006	BANDSAW BLADE CUT LABEL HL
7	X1770021	BLADE GUIDE ASSEMBLY SCALE
8	X1770008	W1770 MODEL # LABEL
9	X1770009	DECORATIVE BLACK STRIPE
10	XPPAINT-1	SHOP FOX WHITE PAINT
11	X1770011	TABLE MEASUREMENT SCALE
12	XLABEL-04	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
13	XLABEL-08H	READ MANUAL LABEL HL
14	XLABEL-06	GLASSES RESPIRATOR LABEL HL
15	X1770015	WHEEL HINGE/STOP BOLT LABEL
16	X1770016	PATENT LABEL
17	XLABEL-04S	ELECTRICITY LABEL (SMALL)
18	X1770018	TABLE TILT HANDWHEEL LABEL
19	X1770019	BLADE ASSEMBLY DIRECTION LABEL
20	X1770020	TENSION ADJUSTMENT LABEL
21	X1770021	MOTOR LABEL
22	X1770022	TABLE LOCK LEVER LABEL
23	X1770023	TABLE ANGLE SCALE

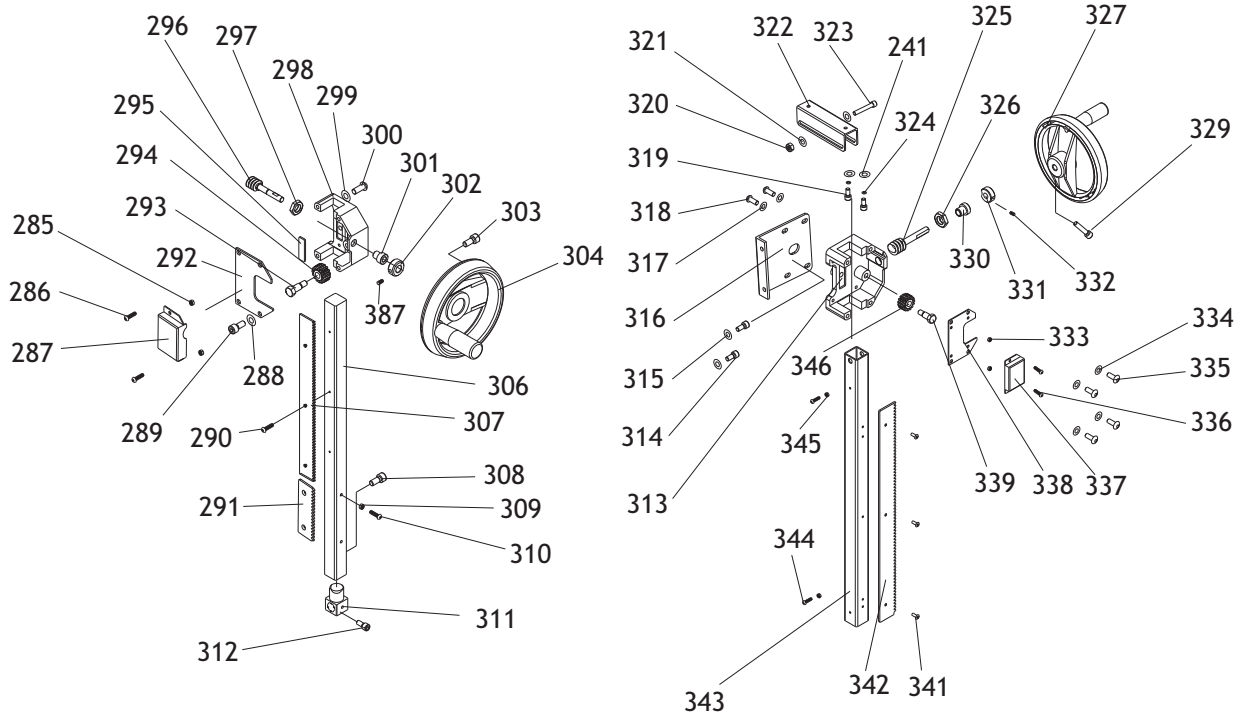
Blade Guides-Cover Breakdown



REF	PART #	DESCRIPTION
147	XPSB04M	CAP SCREW M6-1 X 10
148	XPLW03M	LOCK WASHER 6MM
149	XPW03M	FLAT WASHER 6MM
150	X1770150	SUPPORT PLATE
151	XPW03M	FLAT WASHER 6MM
152	XPSB04M	CAP SCREW M6-1 X 10
153	X1770153	BLADE GUARD
154	XPW03M	FLAT WASHER 6MM
155	XPSB04M	CAP SCREW M6-1 X 10
156	X1770156	SLIDING PLATE
157	X1770157	PLASTIC WASHER 6MM
158	XPFS11M	FLANGE SCREW M6-1 X 10
159	X1770159	ADJUST BAR
160	X1770160	BLADE GUIDE SUPPORT
161	XPB04M	HEX BOLT M6-1 X 10

REF	PART #	DESCRIPTION
162	X1770162	UPPER SPACING SLEEVE
163	XP6201ZZ	BALL BEARING 6201ZZ
164	XPR03M	EXT RETAINING RING 12MM
165	XPSB01M	CAP SCREW M6-1 X 16
166	XPW03M	FLAT WASHER 6MM
167	X1770167	ADJUSTING SHAFT
173	XPSB29M	CAP SCREW M6-1 X 40
174	X1770174	HANDLE BUSHING
175	XP6202ZZ	BALL BEARING 6202ZZ
176	XPR05M	EXT RETAINING RING 15MM
177	X1770177	ECCENTRIC SHAFT
179	X1770179	SUPPORT BRACKET
180	XPSB01M	CAP SCREW M6-1 X 16
555	XPLN03M	LOCK NUT M6-1

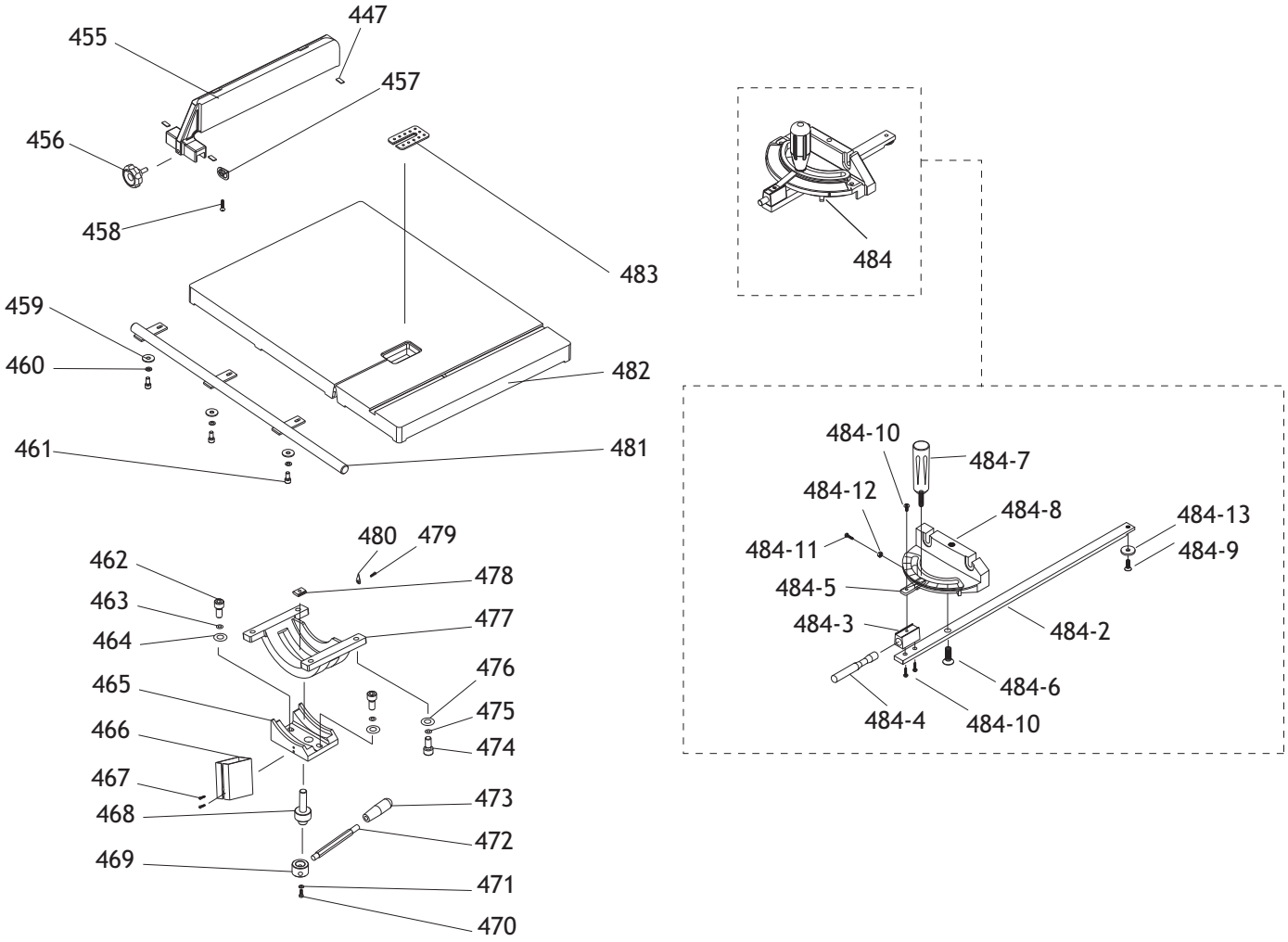
Guide Post-Table Tilt Breakdown



REF	PART #	DESCRIPTION
241	XPW03M	FLAT WASHER 6MM
285	XPN06M	HEX NUT M5-.8
286	XPFS07M	FLANGE SCREW M5-.8 X 10
287	X1770287	COVER
288	XPLW04M	LOCK WASHER 8MM
289	XPSB11M	CAP SCREW M8-1.25 X 16
290	XPFH19M	FLAT HD SCR M4-.7 X 10
291	X1770291	EXTENSION RACK
292	X1770292	COVER
293	X1770293	FIXED BOLT
294	X1770294	PINION GEAR
295	X1770295	FIXED PLATE
296	X1770296	WORM SHAFT
297	XPN05M	HEX NUT M16-1.5
298	X1770298	GUIDE BRACKET
299	XPW01M	FLAT WASHER 8MM
300	XPSBS04M	BUTTON HD CAP SCR M8-1.25 X 35
301	X1770301	BUSHING
302	X1770302	SWITCH BUSHING
303	XPSB06M	CAP SCREW M6-1 X 25
304	X1770304	HANDWHEEL
306	X1770306	UPPER GUIDE BAR
307	X1770307	RACK
308	XPSB01M	CAP SCREW M6-1 X 16
309	XPN04M	HEX NUT M4-.7
310	XPS38M	PHLP HD SCR M4-.7 X 10
311	X1770311	UPPER GUIDE SUPPORT BLOCK
312	XPB83M	HEX BOLT M6-1 X 16
313	X1770313	GUIDE BRACKET
314	XPSB14M	CAP SCREW M8-1.25 X 20
315	XPLW04M	LOCK WASHER 8MM

REF	PART #	DESCRIPTION
316	X1770316	SUPPORT PLATE
317	XPW01M	FLAT WASHER 8MM
318	XPSBS22M	BUTTON HD CAP SCR M8-1.25 X 20
319	XPSB04M	CAP SCREW M6-1 X 10
320	XPLN04M	LOCK NUT M8-1.25
321	XPW01M	FLAT WASHER 8MM
322	X1770322	SLIDING PLATE
323	XPB30M	HEX BOLT M8-1.25 X 55
324	XPLW03M	LOCK WASHER 6MM
325	X1770325	WORM SHAFT
326	XPN05M	HEX NUT M16-1.5
327	X1770327	HANDWHEEL
329	XPSB06M	CAP SCREW M6-1 X 25
330	X1770330	BUSHING
331	X1770331	SWITCH BUSHING
332	XPSS07M	SET SCREW M5-.8 X 5
333	XPN06M	HEX NUT M5-.8
334	XPLW04M	LOCK WASHER 8MM
335	XPSB11M	CAP SCREW M8-1.25 X 16
336	XPFS07M	FLANGE SCREW M5-.8 X 10
337	X1770337	COVER
338	X1770338	COVER
339	X1770339	SPECIAL BOLT
341	XPFH19M	FLAT HD SCR M4-.7 X 10
342	X1770342	RACK
343	X1770343	SQUARE TUBE
344	XPFS05M	FLANGE SCREW M4-.7 X 10
345	XPN04M	HEX NUT M4-.7
346	X1770346	PINION GEAR
387	XPSS07M	SET SCREW M5-.8 X 5

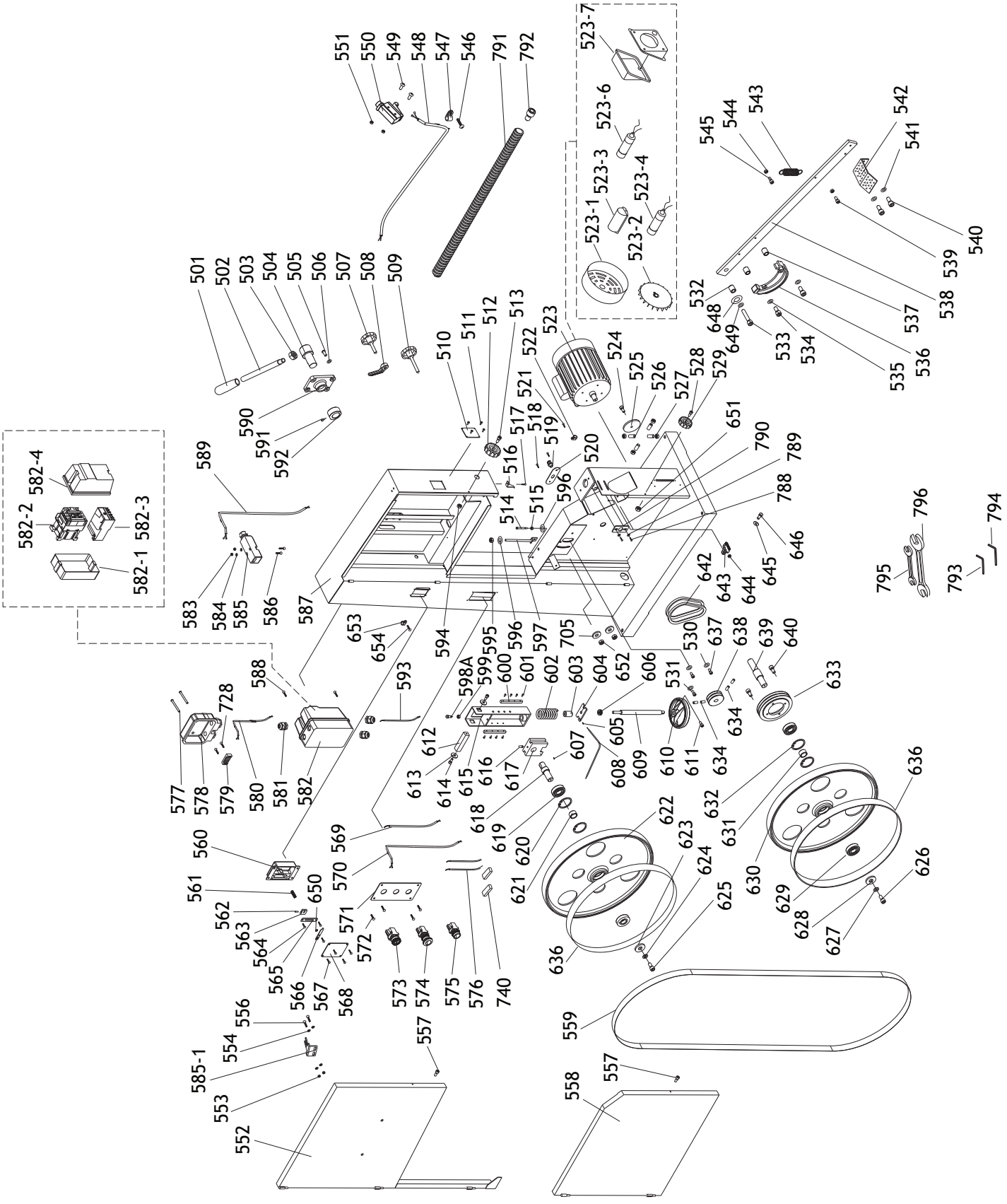
Table-Trunnion Breakdown



REF	PART #	DESCRIPTION
447	X1770447	NYLON PIECE
455	X1770455	FENCE
456	X1770456	KNOB SCREW M10-1.5 X 25
457	X1770457	POINTER
458	XPFS01M	FLANGE SCREW M5-.8 X 8
459	XPW01M	FLAT WASHER 8MM
460	XPLW04M	LOCK WASHER 8MM
461	XPB09M	CAP SCREW M8-1.25 X 20
462	XPSB72M	CAP SCREW M10-1.5 X 30
463	XPLW06M	LOCK WASHER 10MM
464	XPW04M	FLAT WASHER 10MM
465	X1770465	TRUNNION HOUSING
466	X1770466	BLADE GUARD
467	XPFS11M	FLANGE SCREW M6-1 X 10
468	X1770468	PRESS SHAFT
469	X1770469	MICRO ADJUSTING RING
470	XPSB14M	CAP SCREW M8-1.25 X 20
471	XPLW04M	LOCK WASHER 8MM
472	X1770472	HANDLE SHAFT
473	X1770473	HANDLE KNOB M12-1.75 (FEMALE)
474	XPSB84M	CAP SCREW M10-1.5 X 35
475	XPLW06M	LOCK WASHER 10MM

REF	PART #	DESCRIPTION
476	XPW04M	FLAT WASHER 10MM
477	X1770477	TRUNNION BLOCK
478	X1770478	PRESS BLOCK
479	XPS38M	PHLP HD SCR M4-.7 X 10
480	X1770480	POINTER
481	X1770481	GUARD RAIL
482	X1770482	TABLE
483	X1770483	TABLE INSERT
484	X1770484	MITER GAUGE ASSEMBLY
484-2	X1770484-2	GUIDE BAR
484-3	X1770484-3	LOCATE BRACKET
484-4	X1770484-4	LOCATE SHAFT
484-5	X1770484-5	POINTER
484-6	X1770484-6	STEP SHOULDER
484-7	X1770484-7	HANDLE
484-8	X1770484-8	MITER GAUGE BODY
484-9	XPFH9M	FLAT HD SCR M6-1 X 6
484-10	XPS06	PHLP HD SCR 10-24 X 3/8
484-11	XPS56M	PHLP HD SCR M4-.7 X 16
484-12	XPN04M	HEX NUT M4-.7
484-13	XPW01M	FLAT WASHER 8MM

Body Breakdown



Body Parts List

REF	PART #	DESCRIPTION
501	X1770501	HANDLE KNOB M16-1.5
502	X1770502	HANDLE SHAFT
503	X1770503	NUT M16-1.5
504	X1770504	ECCENTRIC SHAFT
505	XPSBS25M	BUTTON HD CAP SCR M10-1.5 X 20
506	XPLW06M	LOCK WASHER 10MM
507	X1770507	KNOB SCREW M10-1.5 X 25
508	X1770508	LOCK HANDLE M10-1.5
509	X1770509	KNOB SCREW M10-1.5 X 25
510	X1770510	BLADE TRACKING WINDOW
511	X1770511	RIVET 3.2 X 10
512	X1770512	LATCHING KNOB 6MM
513	XPSB02M	CAP SCREW M6-1 X 20
514	XPB73M	HEX BOLT M10-1.5 X 50
515	XPN02M	HEX NUT M10-1.5
516	X1770516	HEIGHT POINTER
517	XPFS07M	FLANGE SCREW M5-.8 X 10
518	XPHTEK4M	TAP SCREW M4 X 8
519	X1770519	STRAIN RELIEF M20
520	X1770520	PLATE
521	XPHTEK4M	TAP SCREW M4 X 8
522	X1770522	CORD CLAMP 1/2”
523	X1770523	MOTOR 5HP 220V 1-PH
523-1	X1770523-1	FAN COVER
523-2	X1770523-2	FAN
523-3	X1770523-3	CAPACITOR COVER
523-4	X1770523-4	S CAPACITOR 400M 250V 1-3/4 X 3-1/2
523-6	X1770523-6	R CAPACITOR 45M 350V 1-3/4 X 3-3/4
523-7	X1770523-7	WIRING BOX
524	XPSBS22M	BUTTON HD CAP SCR M8-1.25 X 20
525	X1770525	COVER
526	XPB01M	HEX BOLT M10-1.5 X 30
527	XPN02M	HEX NUT M10-1.5
528	XPSB02M	CAP SCREW M6-1 X 20
529	X1770529	LATCHING KNOB 6MM
530	XPW01M	FLAT WASHER 8MM
531	XPSB31M	CAP SCREW M8-1.25 X 25
532	X1770532	BUSHING
533	XPSB31M	CAP SCREW M8-1.25 X 25
534	XPSB06M	CAP SCREW M6-1 X 25
535	XPLW03M	LOCK WASHER 6MM
536	X1770536	BRAKE SHOE
537	X1770537	BUSHING
538	X1770538	BRAKE LEVER
539	XPSB01M	CAP SCREW M6-1 X 16
540	XPSB01M	CAP SCREW M6-1 X 16
541	XPLW03M	LOCK WASHER 6MM
542	X1770542	BRAKE STEP PLATE
543	X1770543	EXTENSION SPRING
544	XPN01M	HEX NUT M6-1
545	XPSB01M	CAP SCREW M6-1 X 16

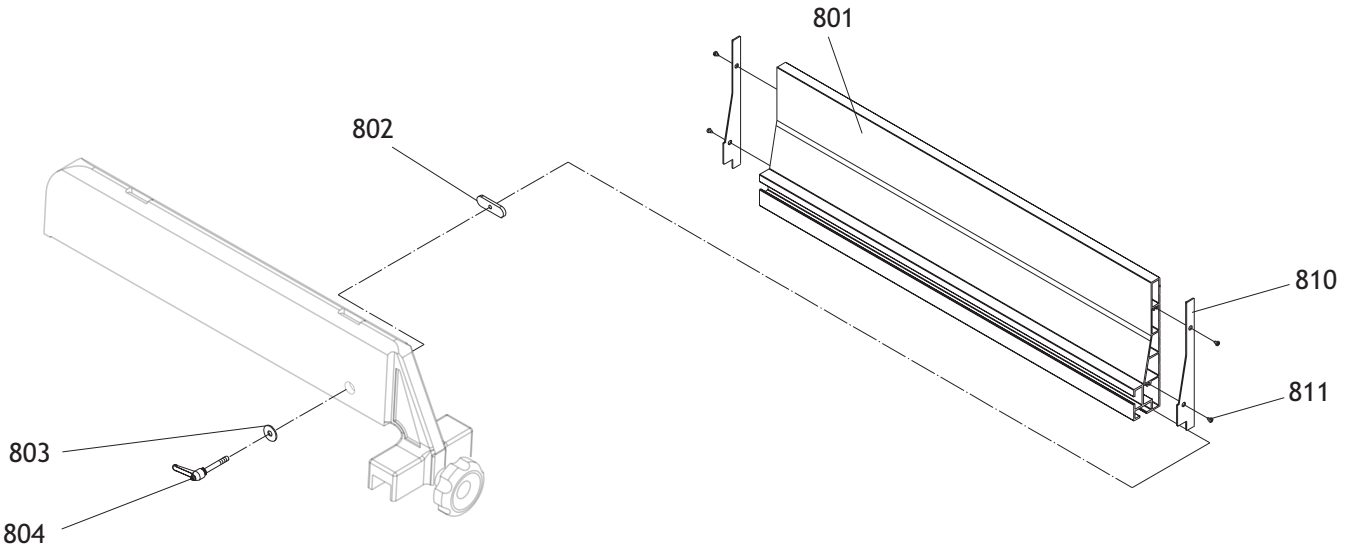
REF	PART #	DESCRIPTION
546	XPHTEK4M	TAP SCREW M4 X 8
547	X1770547	CORD CLAMP 5/8”
548	X1770548	STEP CORD 16AWG X 3C
549	XPB41M	HEX BOLT M4-.7 X 30
550	X1770550	LIMIT SWITCH KL7141
551	XPN04M	HEX NUT M4-.7
552	X1770552	UPPER WHEEL COVER
553	XPN04M	HEX NUT M4-.7
554	XPW05M	FLAT WASHER 4MM
556	XPS38M	PHLP HD SCR M4-.7 X 10
557	XPSB04M	CAP SCREW M6-1 X 10
558	X1770558	LOWER WHEEL COVER
559	X1770559	SAW BLADE 4190 X 25.4 X 0.9MM
560	X1770560	UPPER WHEEL SLIDING BRACKET
561	X1770561	SPRING
562	X1770562	PIN 3 X 12
563	X1770563	MOVING PLATE
564	XPHTEK15M	TAP SCREW M4 X 10
565	X1770565	FIX PLATE
566	X1770566	TENSION POINTER
567	XPHTEK6M	TAP SCREW M4 X 16
568	X1770568	TENSION SCALE
569	X1770569	CONNECTING CORD
570	X1770570	SWITCH CORD 16AWG X 3C
571	X1770571	SWITCH PLATE
572	XPHTEK15M	TAP SCREW M4 X 10
573	X1770573	KEY SWITCH DIA. 22
574	X1770574	STOP SWITCH DIA. 22
575	X1770575	START SWITCH DIA. 22
576	X1770576	CONNECTING CORD
577	XPFS09M	FLANGE SCREW M5-.8 X 50
578	X1770578	TERMINAL BOX
579	X1770579	TERMINAL BAR
580	X1770580	POWER CORD 12AWG X 3C
581	X1770581	STRAIN RELIEF M20
582	X1770582	MAGNETIC SWITCH MPE-18 22A
582-1	X1770582-1	MAGNETIC SWITCH BACK COVER
582-2	X1770582-2	CONTACTOR SDE MA-18 220V
582-3	X1770582-3	OL RELAY SDE RA-30 18-26A
582-4	X1770582-4	MAG SWITCH FRONT COVER
583	XPN04M	HEX NUT M4-.7
584	XPW05M	FLAT WASHER 4MM
585	X1770585	DOOR LATCH SWITCH ADZ-S11
585-1	X1770585-1	DOOR LATCH PLATE
586	XPFS10M	FLANGE SCREW M4-.7 X 35
587	X1770587	MACHINE BODY
588	XPFS07M	FLANGE SCREW M5-.8 X 10
589	X1770589	SWITCH CORD 16AWG X 3C
590	X1770590	HOUSING PLATE
591	XPSB31M	CAP SCREW M8-1.25 X 25
592	X1770592	CAM

Body Parts List Continued

REF	PART #	DESCRIPTION
593	X1770593	MOTOR CORD 12AWG X 3C
594	XPLN03M	LOCK NUT M6-1
595	XPN02M	HEX NUT M10-1.5
596	XPW04M	FLAT WASHER 10MM
597	X1770597	ADJUST BOLT
598A	XPSB60M	CAP SCREW M8-1.25 X 55
599	XPN03M	HEX NUT M8-1.25
600	X1770600	LOCATE PLATE
601	XPFH39M	FLAT HD SCR M5-.8 X 16
602	X1770602	COMPRESSION SPRING
603	X1770603	BUSHING
604	X1770604	PRESS BLOCK
605	XPSS07M	SET SCREW M5-.8 X 5
606	XP51201	THRUST BEARING 51201
607	XPSS07M	SET SCREW M5-.8 X 5
608	X1770608	TENSION LINE
609	X1770609	SHAFT
610	X1770610	HANDWHEEL
611	XPSB06M	CAP SCREW M6-1 X 25
612	X1770612	SQUARE SHAFT
613	XPW01M	FLAT WASHER 8MM
614	XPSB14M	CAP SCREW M8-1.25 X 20
615	X1770615	UPPER WHEEL HINGE ASSY
616	XPSS75M	SET SCREW M10-1.5 X 16
617	X1770617	GUIDE BLOCK
618	X1770618	UPPER WHEEL SHAFT
619	X1770619	BALL BEARING 6205LLU
620	XPR26M	INT RETAINING RING 52MM
621	X1770621	BUSHING
622	X1770622	UPPER WHEEL DIA. 21”
623	XPW01M	FLAT WASHER 8MM
624	XPLW04M	LOCK WASHER 8MM
625	XPSB14M	CAP SCREW M8-1.25 X 20
626	XPSB14M	CAP SCREW M8-1.25 X 20
627	XPLW04M	LOCK WASHER 8MM
628	XPW01M	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
629	X1770629	BALL BEARING 6205LLU
630	X1770630	LOWER WHEEL DIA. 21”
631	X1770631	BUSHING
632	XPR26M	INT RETAINING RING 52MM
633	X1770633	PULLEY
634	XPSS04M	SET SCREW M6-1 X 12
636	X1770636	TIRE
637	XPSB14M	CAP SCREW M8-1.25 X 20
638	X1770638	PULLEY
639	X1770639	LOWER SHAFT
640	XPSBS22M	BUTTON HD CAP SCR M8-1.25 X 20
642	X1770642	V-BELT A-30 4L300
643	X1770643	BRUSH
644	XPLN03M	LOCK NUT M6-1
645	XPW03M	FLAT WASHER 6MM
646	XPSB02M	CAP SCREW M6-1 X 20
648	XPW01M	FLAT WASHER 8MM
649	XPLW04M	LOCK WASHER 8MM
650	XPW05M	FLAT WASHER 4MM
651	XPLN03M	LOCK NUT M6-1
652	XPN03M	HEX NUT M8-1.25
653	X1770653	CORD CLAMP 5/16"
654	XPHTEK15M	TAP SCREW M4 X 10
705	XPW01M	FLAT WASHER 8MM
728	XPS52M	PHLP HD SCR M4-.7 X 20
740	X1770740	CORD CONNECTOR 224-201
788	XPFS11M	FLANGE SCREW M6-1 X 10
789	XPW03M	FLAT WASHER 6MM
790	X1770790	SUPPORT
791	X1770791	CORD PROTECTOR 12.7 X 1100
792	X1770792	CORD BUSHING
793	XPAW05M	HEX WRENCH 5MM
794	XPAW06M	HEX WRENCH 6MM
795	XPWR1013	WRENCH 10/13
796	XPWR1719	WRENCH 17/19

Resaw Fence Breakdown



REF	PART #	DESCRIPTION
801	X1770801	RESAW FENCE (AL) 590MM
802	X1770802	MOVING PLATE
803	XPW01M	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
804	X1770804	ADJUSTMENT HANDLE M8 X 44
810	X1770810	END COVER 148 X 22 X 1
811	XPHTEK3M	TAP SCREW M3.5 X 8

Warranty Registration

Name_____

Street _____

City _____ State_____ Zip_____

Phone #_____ Email_____ Invoice #_____

Model #_____ Serial #_____ Dealer Name_____ Purchase Date_____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?
_____ Advertisement _____ Friend ____ Local Store
_____ Mail Order Catalog _____ Website ____ Other:

2. How long have you been a woodworker/metalworker?
_____ 0-2 Years _____ 2-8 Years ____ 8-20 Years _____ 20+ Years

3. How many of your machines or tools are Shop Fox?
_____ 0-2 _____ 3-5 ____ 6-9 _____ 10+

4. Do you think your machine represents a good value? _____ Yes ____ No

5. Would you recommend Shop Fox products to a friend? _____ Yes ____ No

6. What is your age group?
_____ 20-29 _____ 30-39 ____ 40-49
_____ 50-59 _____ 60-69 ____ 70+

7. What is your annual household income?
_____ $20,000-$29,000 _____ $30,000-$39,000 ____ $40,000-$49,000
_____ $50,000-$59,000 _____ $60,000-$69,000 ____ $70,000+

8. Which of the following magazines do you subscribe to?

____ Cabinet Maker
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Modeltec
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Practical Homeowner
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

9. Comments:_____

_____

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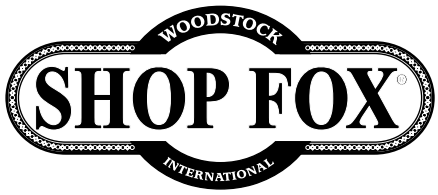
CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here



WOODSTOCK INTERNATIONAL INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY

Woodstock International, Inc. warrants all Shop Fox machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair, replace, or arrange for a dealer refund at its expense and at its option, the Shop Fox machine or machine part, which in proper and intended use has proven to be defective, provided that the original owner returns the product prepaid to an authorized warranty or repair facility as designated by our Bellingham, Washington office with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.’s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law, acts or electrical codes. We do not reimburse for third party repairs. In no event shall Woodstock International, Inc.’s liability under this limited warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all Shop Fox machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.